AMERICAN CINEMATOGRAPHER

THE MOTION PICTURE CAMERA MAGAZINE

Price
25¢
Foreign 35c

April, 1938

Published in Hollywood by
American Society of Cinematographers

Durable

Du Pont film base support is remarkably tough and durable. This is the reason why Du Pont cine film products are so very long wearing and scratch resistant.

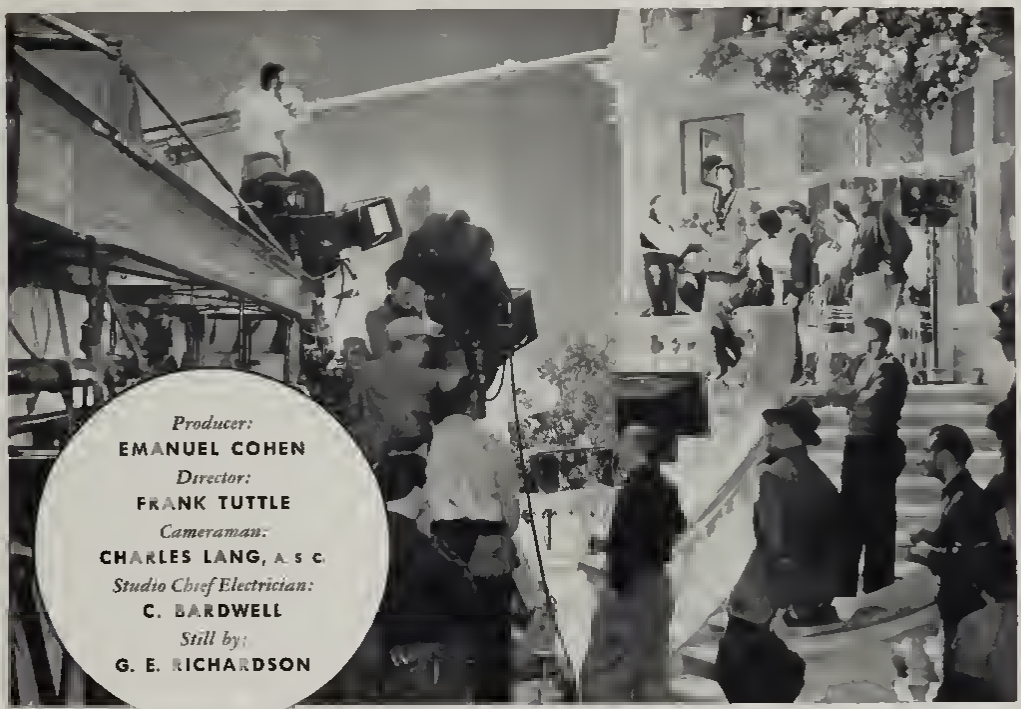
For better results try Du Pont in your next production.

Du Pont Film Manufacturing Corporation
INCORPORATED

9 Rockefeller Plaza
New York. . . . N. Y.
Plant . . Parlin, N. J.

SMITH & ALLER, LTD.
6656 Santa Monica Blvd.
Hollywood . . . California

BETTER THINGS for BETTER LIVING through CHEMISTRY



A "still" interlude during the shooting of PARAMOUNT'S new Bing Crosby musicol, "DR. RHYTHM," reminds us to remind you thot—

G-E MAZDA lamps are VERSATILE

You can use G-E MAZDA lamps to light the whole set, as in this scene from "Dr. Rhythm."

You can use them effectively for close-ups. And G-E MAZDA lamps are especially handy when space is cramped, because you can put them under a chair, mount them on the camera dolly, or mount them on parallels.

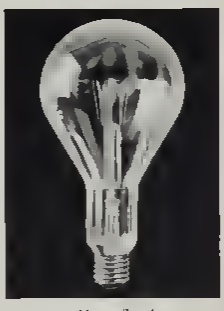
You can mix G-E MAZDA lamps with arcs or daylight . . . and be sure that your light will blend.

You can use them for process work . . . and for special effects.

They're good for black-and-white, and they are good for color.

And there are some 9,000 different types and sizes of G-E MAZDA lamps, upon which you can call to produce any lighting effects you desire.

Are you benefitting fully from this versatility and flexibility? General Electric Company, Nela Park, Cleveland, Ohio.

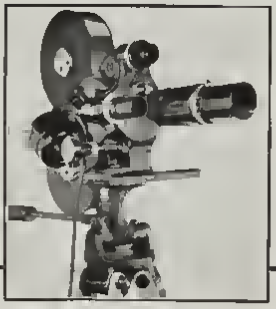


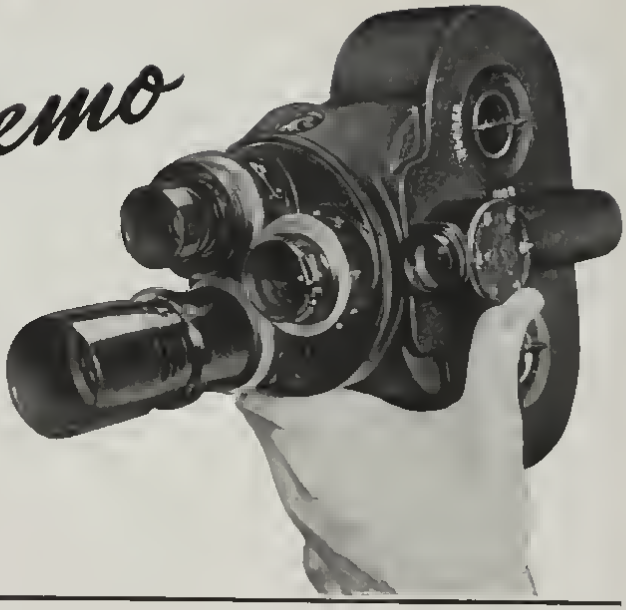
Meteflood

GENERAL ELECTRIC
MAZDA LAMPS

THE

New Eyemo





If Mr. Hyde had been a good man...

IF MR HYDE had been a good man then we might have compared the new Eyemo with the swift-changing, dual personality of Dr Jekyll and Mr. Hyde. The new Eyemo is capable of similarly amazing quick and complete transformations—but in all of its many phases it is always *good*.

From a handy, spring-driven hand camera, the Eyemo may be quickly converted by attachments to cope with every professional demand—a superb, versatile 35 mm. movie camera ready for any emergency in field or studio

What will you have? A swift shift of lenses? . . . conversion from 100-foot film capacity to 200- or 400-foot magazines? . . . a tripod mount or a light, easy-to-handle hand camera? . . . a change from electric to spring or hand drive when convenience dictates? . . . a camera for silent film or a hookup for sound? . . . slow motion or silent or sound speeds? Whatever the demand, the new Eyemo is there to meet it.

Made with typical Bell & Howell precision and yet with a sturdiness that gives it unmatched dependability in the strenuous work for which it is designed. Such features as three-lens turret, focusing and diaphragm controls visible through the spyglass viewfinder, interchangeability of motors, standard S.M.P.E. sound aperture, and vibrationless governor assuring accurate speeds make the new Eyemo distinctively superior in the field of portable cameras—an instrument of unexcelled performance universally popular with newsreel cameramen, explorers, and other professional photographers.

Write for detailed information—it will be mailed without obligation.

BELL & HOWELL COMPANY

1848 LARCHMONT AVENUE, CHICAGO

NEW YORK 11 WEST 42d STREET • HOLLYWOOD 716 NORTH LA BREA AVENUE

LONDON 13-14 GREAT CASTLE STREET

Established 1907

BELL & HOWELL

BELL & HOWELL COMPANY AC 4-38
1848 Larchmont Ave., Chicago, Illinois

Please mail me a copy of your ☐ Eyemo catalog, ☐ Taylor-Hobson Cooke lens catalog

Name .....

Address .....

City ..... *State* .....

AMERICAN CINEMATOGRAPHER

A Technical and Educational publication on motion picture photography

Published monthly by the
AMERICAN SOCIETY
OF CINEMATOGRAPHERS, INC
1782 North Orange Drive
Hollywood (Los Angeles) California

Telephone GRanite 2135

VICTOR MILNER President
FRED W JACKMAN Treasurer

Vol. 19 April, 1938 No 4

Contents

Threescore De Mille productions in 25 years gross 130 millions 136
By William Hebert

Tuland's "Dead End" selected in caucus as one of year's three best photographed pictures 141

Herman A De Vry Company celebrates 25 years in business 142

What About Me? 145
By Bee Gee, A S C

Low key lighting may be as easy in color as it is in monochrome 146
By W. Howard Greene, A S C

Farnham and associates honored by General Electric subsidiary 147

Frank Capra and Norman Alley guests at A S C Gettogether. 148

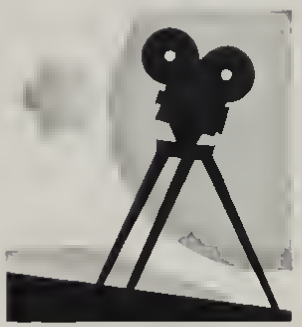
Art Reeves resumes activity in Camera Supply 149

Agfa extends availability of fast emulsions 150

Research Council names process committee 152

The Front Cover

BETTE DAVIS and George Brent are shown on the cover in a scene from "Jezebel" at the Warner studio. Director William Weyler by the side of the camera earnestly studies the portrayal of the two players Ernest Haller, A S C, directs the photography Mack Elliott photographed the still



The Staff

EDITOR
George Blaisdell

WASHINGTON STAFF CORRESPONDENT
Reed N Haythorne, A S C

TECHNICAL EDITOR
Emery Huse, A S C

ADVISORY EDITORIAL BOARD
Victor Milner, A S C
James Van Trees, A S C
Fred W Jackman, A S C
Farciot Edouart, A S C
Fred Gage, A S C
Dr J S Watson, A S C
Dr L A Jones, A S C
Dr C E K Mees, A S C
Dr W B Rayton, A S C
Dr Herbert Meyer, A S C
Dr V B Seaze, A S C

CIRCULATION MANAGER
L F Graham

NEW YORK REPRESENTATIVE
S R Cowan, 19 East 47th St., New York
Phone Plaza 3-0483

FOREIGN REPRESENTATIVE
Georges Benoit, 100 Allee Franklin
Pavillons-sous-Bois, Seine France Telephone LeRaincy 13-19

AUSTRALIAN REPRESENTATIVE
McGill's 179 Elizabeth Street Melbourne
Australian and New Zealand agents

Neither the American Cinematographer nor the American Society of Cinematographers is responsible for statements made by authors This magazine will not be responsible for unsolicited manuscripts.

ESTABLISHED 1920 Advertising Rates on application Subscription United States, $2.50 a year Canada and the Pan-American Union, $3.00 a year Foreign $3.50 a year Single copies 25 cents back numbers 30 cents, foreign single copies 35 cents, back numbers, 40 cents COPYRIGHT 1938 by American Society of Cinematographers Inc.

Entered as second class matter November 18 1937, at the post office at Los Angeles, California under the Act of March 3 1879

Threescore De Mille Productions in 25 Years Gross 130 Millions

Story of Actor-Director-Showman Who Has Contributed Much to Screen of Today Because in Young Industry He Had Vision to See and Courage to Act

By WILLIAM HEBERT

A MAN whose sixty-four films have grossed more than $130,000,000 today looks back on twenty-five years of achievement in motion pictures.

His name, Cecil B. DeMille, is the standard of the spectacular in entertainment. It is the symbol of showmanship, the mark of great direction and great exploitation, and in the glitter of its world renown people sometimes forget that he is more than a showman.

But when the records have been sifted it will be found he towers among the pioneers as a contributor of screen magic.

And many innovations obscured now by their own familiarity can be traced to him.

De Mille, for example, was the first to print a cast of characters on the screen. Up till then you guessed who was in the picture. Aside from the star and perhaps one or two featured players, you knew no one—until De Mille came along with his system, borrowed from theater programs, of giving credit where credit was due.

And soon his method became standard for all films.

Great Players

Another mark of his early work was his insistence on great players in great plays. With this he did more than can be estimated to elevate the movies from a novelty to an art.

There are those still alive who remember when it was enough that a picture moved. It didn't have to have story if it had action. Cowboys chased Indians through a rain of celluloid scratches and that was thrill enough.

But you couldn't base an enduring art on it.

De Mille and his associates, Lasky and Goldwyn, brought such personalities as Dustin Farnum, Geraldine Farrar and Wallace Reid into films in a day when celluloid's best use was in making collars and glamour was just an old Scotch word meaning "a spell cast by magic."

For their first picture they bought Edwin Milton Royle's successful play "The Squaw Man"—though they had to buy it "on time." To compete with De Mille, Lasky and Goldwyn, opposition had to make as good or better pictures. And though De Mille often says, "Competition is responsible for most of the advances made in motion pictures," it was very often competition from De Mille.

Cecil B. De Mille

Insists on Story

He insisted then, and he insists now, on "story." He frequently says, "There is nothing the matter with the picture business that good pictures can't cure." And again, "The only thing you can safely predict about pictures is that good pictures will always make money and bad ones lose it." His regulation method of making good pictures is to get a good yarn before he starts casting and make it "foolproof" before he starts shooting. This may account for his amazing record of successes.

His obtaining Geraldine Farrar for "Joan the Woman" and "Carmen" was one of the masterstrokes of showmanship in Hollywood history.

Up to then celebrities had frowned on the films as a low pursuit, but De Mille changed all that by putting one of the world's greatest figures in them. He also shot his first big scenes of battle and pageantry in "Joan the Woman." And the stills show that they would be big scenes, finely photographed, even today.

De Mille has always been "camera-conscious" and worked hard to perfect camera technique. He first became aware of composition when his father took him to an exhibition of the works of Dore. He must then have been about five years old, but Dore's works still influence him. And he hires artists like Dan Sayre Groesbeck, skilled in composition and bold execution, to help him plan each frame he shoots.

Starts Early

When he was about nine he went often to the old Jacobs book store on Eighth avenue near Twentieth street, in New York, and bought cardboard strips of soldiers, cowboys, Indians, "Buffalo Bill" and Wild Bill Hickok, whom he was later to immortalize on the screen in "The Plainsman." Cutting them out of their background he would arrange them, standing against his own "stage" setting.

He bought and enjoyed one of the first Kodaks—an object about the size of Phil Baker's accordion which required more focusing than a ten-cent pair of opera glasses. And, prophetically, this camera brought his first taste of fame.

Living at Pompton Lake, N. J., and still in his teens, he went out to the

dam at Lake Ramapo to take a picture of the flood waters But when he arrived he found that the danger to Pompton was much more severe than he had anticipated Residents were praying that the dam would go out so that Pompton wouldn't go under

Being the only one with a horse, the young De Mille was asked to ride 15 miles to the cap works at Haskell and bring back a charge of dynamite Only too glad to be an actor in such a drama De Mille intrusted his precious camera to a man standing there and rode off with the case slung over his shoulder

Real Melodrama

Several hours later he was back, rearing on his steed with a mighty smiting of sparks from the earth, and surrendered the camera case full of dynamite to a burgher.

The men took the dynamite and blew up the dam—and De Mille became a local hero

His first movie camera came, of course, years later He had seen the early flickers in the Eden Musee and didn't think much of their possibilities—which is not surprising for a man who predicted that there would never be a horseless carriage, after his college mate blew his hand off trying to invent one

But he, Lasky and Goldwyn had been forced into the new medium by their inability to make any substantial gains in other fields The story of their early struggles, their capitalizing for $20,000 and their tribulations in bringing out "The Squaw Man" has been told many times, but the story of "Rembrandt lighting" will bear retelling

Rembrandt Lighting

Always experimenting, De Mille decided one day to do something besides shoot scenes in which the far corners of the set were as brightly lighted as the foreground. For a spotlight he sent down to the Mason Opera House in Los Angeles, which he had helped open as one of Francois Villon's vagabonds in "If I Were King."

When it arrived he set it up on the outdoor stage of the studio at Selma and Vine and attempted to photograph an actor's face half in light and half in shadow. They told him he couldn't do that, but he did

When the completed picture—it was "The Warrens of Virginia"—was shown in New York, Samuel Goldwyn wired him, "What kind of a picture is this? You can only see half the actor's faces, so the exhibitors only want to pay half price."

De Mille thought fast and wired back, "Can I help it if you don't know Rembrandt lighting when you see it?" Goldwyn, quick to capitalize on a showmanlike selling angle, wired back, "If that's what is is, they'll pay double for it."

And, sure enough, they did.

Many Contributions

It would be impossible to measure all of De Mille's contributions to the movies' art, but artificial lighting thus became one of them His others include boom shots, his first boom having been a plank with the camera nailed to the end of it

De Mille was often as unorthodox in his choice of material and stars as he was in his triumphs over technical difficulties When $10,000 was the top budget for a big picture, he spent $20,000, with consequent growth in box office and prestige

Maker of Stars

He saw Gloria Swanson leaning against a door in a Mack Sennett comedy, thought she had something, sent for her and made her the most grandiloquent glamour girl of her day He

De Mille as a young leading man

took blond Wallace Reid, who had been a bit player in "The Birth of a Nation," and built the greatest of the screen's early matinee idols

Bebe Daniels, Agnes Ayres, Sessue Hayakawa, Thomas Meighan, Pola Negri, Ramon Novarro, Russ Columbo, Jack Holt, Leatrice Joy, Bill Boyd, Charles Bickford, Charles Laughton and many more followed under the De Mille aegis to fame

Always persuaded that daring was the first principle of showmanship, De Mille made the social dramas, "Don't Change Your Husband" and "Why Change Your Wife?" which preached against divorce when divorce was the hottest topic in American life

Made inexpensively with such stars as Elliot Dexter, cigar-chewing Theodore Roberts and Gloria Swanson, these pictures were sensational, to say the least, and were correspondingly successful

He also made the first of his eleven bathtub scenes in the above pictures and launched the reputation for lavishness, color, sophistication and bizarre exoticism which he still retains.

Picture Without Star

When the "star system" began to make inroads on the producers' profits it was De Mille who was called upon to save the De Mille-Lasky-Goldwyn-Zukor outfit Mary Pickford, Douglas Fairbanks and others had pulled out to make their own pictures, and were demanding such enormous salaries, for their day, that no one could afford to hire them anyway

De Mille went to his associates and told them he could make a picture without any stars that would have a world-wide appeal, if they would let him go ahead They were willing, until they heard the subject — "The Ten Commandments"

It was axiomatic in show business that religion was not "good theatre," and the powers pulled long faces De Mille talked calmly to them until they showed a disposition to be firm, then he roared and told them he was going ahead anyway

Taking several thousand extras out into the desert, he began filming his first great spectacle—at a cost of about $200,000 a week This was more than had ever before been spent on an entire picture, and he was spending it for just one sequence

When he came in with the footage, Lasky wanted to break his contract He was bankrupting the company, Lasky told him, and they had a bitter fight Somewhere, De Mille raised a million dollars and, purely as a gesture, walked in and laid it on Lasky's desk

"I'll buy myself and the picture out of the company right now," he said

Lasky looked at the money and his first impulse was to sell But in his office was Frank Garbutt, a Los Angeles businessman, who said "Jesse, don't ever sell anything you haven't seen"

Lasky Reconsiders

Lasky reconsidered and let De Mille go ahead The result was a picture the success of which astounded even its director De Mille and Louis B. Mayer have been arguing for years which is the greatest box office success of all time,

(Continued on Page 140)

Scene from "The Squaw Man" Dustin Farnum at right

"Joan the Woman," with Geraldine Farrar and Raymond Hatton in center

Scene from The King of Kings

Scene from "The Sign of the Cross"

Left—Jesse L. Lasky, Cecil B. De Mille (center), Samuel Goldwyn. Right—Geraldine Farrar and Wallace Reid in "Sign of the Cross"

Grosses 130 Millions

(Continued from Page 107)

"The Ten Commandments" or "Ben Hur," and neither has ever opened his books to the other, but each grossed in the neighborhood of ten million dollars

Ups and Downs

Since then De Mille has had his ups and downs. He thinks of "Four Frightened People," for example, with reminiscent shudders. "After seeing it on the screen," he says, "I thought of calling it 'Five Frightened People'—I was the fifth."

But he has made enduring contributions and some of the greatest box office hits in movie history with "The Sign of the Cross," "The Crusades," "Cleopatra."

"The King of Kings" played in 100 theatres in and around New York City alone this Easter.

Lately he has turned to the American scene, with such rip-snorters as "The Plainsman" and "The Buccaneer." He is next going to make "Union Pacific," a resounding saga of America's early railroads and the opening of the West.

He is 56, but talk of retirement bores him, and it would seem strange not to have him come out with one picture a year.

However, we don't have to worry about that for a while, because he says he is going to keep on making pictures as long as he can find subjects to interest him.

And he still has about 100 of them he would like to make.

Wellcome Handbook for 1938 Now Ready for Distribution

The Wellcome Photographic Exposure Calculator Handbook and Diary 1938, published by Burroughs Wellcome & Co., 9 East Forty first street, New York, is now on sale. "This handbook is an up-to-date and reliable guide to the actual practice of photography and is designed to assist the photographer at every stage of his work," is declared on one of the opening pages of the 238-page book. The contents bear out the promise. The little book is 3 by 5½ inches and is bound in stout covers.

The last 55 pages of the book are devoted to exposure and explore the subject with all the thoroughness that may be expected of these publishers. The entire book is of the same high standard.

Left—Scene from "The Plainsman" with Gary Cooper in center. Right—Scene from "The Buccaneer" with Fredric March and Franciska Gaal.

Toland's "Dead End" Selected in Caucus One of Three Best

GREGG TOLAND, A.S.C., for his work in Samuel Goldwyn's "Dead End," completed in the summer of 1937, was honored by the several hundred selecting technicians of the Academy of Motion Picture Arts and Sciences by being chosen prior to the final deciding vote one of the three candidates for chief photographic honor.

The nomination went to one of the younger generation of top cameramen—younger, yes, but still a veteran of seventeen years around the camera. And that is practically a half of his life.

What in the picture business constitutes the unusual and more correctly the rare phase of Toland's experience is that thirteen of the seventeen years have been in the service of one producer—Samuel Goldwyn. There are few if any masters of the camera here or abroad who can show a similar record of continuous employment under one man.

Yet that unbroken affiliation, contrary to what some authorities might advance as a handicap in the way of photographic progress by reason of absence of contact with the methods of other studios, has had no ill effect on the steady growth of Toland's camera product.

Owing frequently to the absence of the Goldwyn schedule of a production which may be assigned to Toland it is the custom of the studio to "loan out" the cameraman to another studio. At the time of the nomination he was photographing a Twentieth Century-Fox picture, "Kidnapped." By reason of this practice the Academy nominee during 1937 passed his exposed film on to the custody of four different laboratories.

These have included MGM's developing and printing plant, which is the home establishment for Goldwyn's film development. Then there have been in black and white the plants of Paramount and Twentieth Century-Fox. In addition there was the Technicolor plant.

Meets Up with Technicolor

That experience with Technicolor, by the way, was the cameraman's first. He stepped into it, so to speak, entirely cold in the technicalities of color. That the production was an important one will be apparent even to the veriest layman who knows the lavish Goldwyn way—"Goldwyn Follies"—a subject that has been the recipient of much praise.

Gregg Toland

for the beauty of its screened result. As has been said, Toland began camera work at the age of sixteen, starting soon after as an assistant to George Barnes, A.S.C. Two years later the latter entered the employ of Goldwyn and Toland went with him. The relation between first camera and assistant underwent change through the grade of second until in due time the two men were given mutual credit on their work. When six years ago Barnes left the Goldwyn employment his associate remained—and there are three years yet to go under the last contract.

There is one particularly important clause in that contract. The provision stipulates that during the life of the contract Toland shall direct at least one film. So that is yet to come, but the cameraman would not deny he is overlooking no opportunities to fortify himself in the possession of every possible measure of equipment against the day when he is called to the director's post.

"Dead End," the photographic quality of which brought attention from Toland's fellow-technicians, was made practically on one set. That set is shown in the accompanying engraving. It reveals a New York street, seemingly an exterior but in actuality under a stage roof.

Creating Daylight

And there was constituted one of the major barriers of the photographer. In the first place it should be mentioned "Dead End" was an important picture, the story cost alone having been $160,000. Then the budget ran on the construction of a section of the main set to $82,000, requiring many electricians and pulling 8000 amperes on practically every scene exposed.

Toland's concern in the photograph-

Scene from Samuel Goldwyn's "Dead End," photographed by Gregg Toland and selected by caucus of Academy technicians as one of three best photographed picture for 1937

ing of this interior-exterior set was the simulation of daylight—the duplication of Old Sol In one instance to accomplish an approximation of his desired objective, the creation of artificial sunshine he bunched eight arc lamps on one huge parallel for his key lighting

Some of the major subjects that have passed under the photographic direction of the cinematographer were Eddie Cantor's "Kid from Spain"; the three Anna Sten pictures; "Dark Angel," "Les Miserables," with Fredric March and Charles Lawton, made by Darryl Zanuck at United Artists, and "These Three, "Beloved Enemy," "Come and Get It" and "Road to Glory"

Asked as to his reaction from his work in color Toland declared it seemed easier to photograph than black and white He admitted his very definite interest in the medium

"And the Goldwyn company is making two Technicolor pictures this year," he concluded, with no attempt to conceal his genuine satisfaction in the anticipation of them coming

Herman A. DeVry Co. Completes Twenty-five Years in Business

Pioneer Head of Manufacturing Concern Looks In on Los Angeles in Course of Recreational Tour That Took Him to Mexico City—16mm. to Be Contender for Bigger Things, Says Former 35mm. Partisan

HERMAN A DeVRY, who as publisher of DeVry Movie News is something of a magazine man himself, was a welcomed visitor by the editor of the Cinematographer during the last week of March The Chicago manufacturer is homeward bound from a trip which has included ten days in Mexico City and points four hundred miles south of that capital

Up to the time he reached Los Angeles he had laid a taboo on two things. One was the steam railroad, for the present journey he choosing to travel on his own wheels all the way into Mexico and around and about the big town and at the end of his stay to drive into Acapulco and there board ship for Los Angeles It was a fine four-day journey, he declares

The second thing on which the Chicagoan had put thumbs down was on the camera and all its allied temptations and distractions Although he packed both a 16mm and a still camera, nevertheless he adhered to a rule which far the present occasion he had decided to make quite hard

Of not mixing rest and recreation when they are designed to be the real stuff just because a camera might get him down.

Allure of the Camera

"You know," he declared by way of explanation, "when I get a camera into my clutches there's only one major thought in my mind—that's to get the best picture I know how to make If it's a beautiful bit of scenery I am concerned how best I can reproduce it no, reproduce is hardly the word I mean, perhaps, how best the pictorial qualities that inhere in photography may enhance it

"I think every man who has had experience with a camera sometimes has a feeling that a scene the possibilities of which he may be studying perhaps may not be just another one of those things it appears to be to the eye When transformed to a print it may be something else again

"So you may understand me when I say that through fear of the entanglements that lie in the breast of every lover of the camera I have not pressed a button since leaving Chicago Mrs DeVry and I came away on a vacation If I had been making pictures I would not have seen the things I most wanted to see Perhaps I've got what you call a single track mind when I'm sighting a camera; my mind seems closed to other things Maybe some time I'll make a return trip with cameras over the ground we have just covered"

The manufacturer smiled "And perhaps you may guess I pretty well know right now just the spots I want to put on film when that trip comes along," he added

"You say you are on a vacation," suggested the editor "Of course, when you stopped off at St Louis, Austin, Dallas and Laredo meeting old friends and business associates you just talked about the weather?"

The smile returned "Why, you know how it is," came the response "When long-time friends get together you can't hang 'em if they get to talking shop!"

Asked as to his mileage on his long trip the manufacturer negatively nodded his head "Really, I can't tell you," he said. "I just kept no books I wanted to be carefree and I was. You see, it's the silver anniversary of the DeVry company and Mrs DeVry and I have been celebrating

"Yes, twenty-five years is a long time And in that time we have established accounts in sixty-eight foreign countries One of these is the interior of Ethiopia, so far into the interior that six weeks' time is required to get a letter to Chicago

"Then another order went to Reunion Island, a French whaling colony in the Indian ocean 400 miles east of Madagascar, where there is a population of less than 200 But that's just an illustration of the way Uncle Sam's motion picture equipment spreads around the world"

35mm and 16mm

Asked about the seemingly changing status of 16mm equipment, if it were the experience of the visitor that the 16mm equipment more and more was being taken over by the advanced amateur and the professional and that the 8mm constantly was growing in the attention of the beginner as well as counting among its partisans some of the advanced amateurs again there was a negative shake of the head

"Of course, it may be understood I am not prejudiced, as yet, in favor of the 8mm I am against the 8mm now for the reasons I was against the 16mm in other days, because at that time the 16mm could not do the things that

Enjoyable Reading, but.. Other Values, Too

I would like to add that I have found your magazine enjoyable reading besides all the interesting, technical and educational value which it possesses

GERALD C SHERMEYER
York, Penn

could be done with 35mm But that relation has been changed"

The Chicago man admitted that for a long time he had been a standpatter for the 35mm film as against claims for the 16mm, but he insists he is no longer He conceded, too, that most of his industrial accounts have changed their medium from 35mm to 16mm

In a number of theaters around Chicago, he suggested, where 16mm sometimes is interjected in a program normally 35mm, the change is not recognized by the persons in the audience In brilliance and definition the smaller film practically matches those of the larger

Again there were small theaters where the use of 16mm made possible the operation of the houses without loss It was in conditions such as this, Mr De Vry suggested, that the 16mm particularly fits, and where for reasons of economy there otherwise would be no film shown

Bigger Things Coming

"Of course, there are a lot of things to be considered and which have got to be smoothed out," Mr DeVry continued "You have got to have good film, That is imperative As one of the last manufacturers to step off the exclusive 35mm pedestal I am free to admit 16mm is going to be a contender for bigger things"

Herman A DeVry, Inc, from a one-man start now employs about 300 persons. The company recently has completed Factory No 2, with an area of 22 500 square feet Added to the area of No 1 factory it gives a combined floor space of 47,500 square feet The business was started in 1913

Behind that beginning, though were twenty years' of work and planning, of building from the bottom upward It was at the time of the World's Fair in Chicago in 1893 that Herman A DeVry first was attracted to motion pictures He came naturally by his liking for show business, admitting with a characteristic chuckle one of his grandfathers was a magician

Is Skipper, Too

Following his work at the World's Fair he became interested in road shows with motion pictures and in theaters One of the subjects was that filmed of the McKinley funeral, a print of which he secured as soon as it was made He became a cameraman in 1910, creating one of the first travel-lecture films, "Around the World in Ninety Minutes"

One of his first cameras was a Lumiere, which was secured for him in France by a Kansas City friend He ran pictures at the Omaha Exposition in 1898 Before starting in business for himself he was for a period with the Watterson Rothacker Laboratory in Chicago

Mr DeVry's hobby, his chief one, rather, is yachting His 82-foot yacht Typee is moored during the summer months in Belmont Harbor, Chicago There every noon he entertains his friends and clients from all over the world. The name of the boat, which parallels that of his projector Type E, was already a part of the craft when he purchased it, but of course that fact in no way militated against the efforts of the previous owner to induce him to buy it He continued the name.

Herman A DeVry

Indicating the motion picture equipment man's skill in navigation as well as in other things Mr DeVry brought the craft from Stamford, Conn, through Long Island Sound, up the Hudson River, through the Erie Canal and the Great Lakes to Chicago

On the craft during the recent World's Fair as many as 200 persons were entertained on board in a week And during that same fair the owner won prizes for his skill in skippering the "Typee" But he has been an owner of deep sea craft for fourteen years

It was a matter of regret in the ASC offices the Chicago manufacturer's engagements would not permit him to remain in town to be a fellow guest of Norman Alley at the society's get-together March 28

It is a remarkable history that lies behind this man from Chicago If in the industry anywhere there is another who has been a part of it for forty-five years and who during that time progressively has advanced without retrogression at any point, and who gives every promise of advancing for many more years to come, this writer knows him not

It has been a life of achievement. And not the least of Herman A DeVry's contributions to human progress has been his work in advancing visual education But that is not a part of the present story

TRIPLE-PROVED

PHOTOGRAPHIC quality . . . fine grain . . . speed . . . Eastman Super X has been proved more than adequate on all three counts. It is the unusually happy combination of these qualities in one film that has made Super X the most outstanding negative material in the entire motion picture field. Eastman Kodak Company, Rochester, N. Y. (J. E. Brulatour, Inc., Distributors, Fort Lee, Chicago, Hollywood.)

EASTMAN *SUPER X*

PANCHROMATIC NEGATIVE

WHAT ABOUT ME?

By

BEE GEE

IT IS NOT the design of this column to criticize the photographic efforts of our membership, but I feel that in the following review there is no criticism but a change in trend

Warner Brothers' technicolor offering of "Gold Is Where You Find It" hits the screen with a shock that will be remembered as a source of photographic reference for some time to come—the same sort of shock we received when we listened to the first sound picture and exclaimed, "Well, this is just about all right" and "Now I *AM* convinced that sound pictures are here to stay" and "Silent pictures are beginning to seem sort of flat"

True, there were pictures that just featured sound, but there is always one picture that seems to click the padlock on your acceptance of the idea that sound pictures are here to stay.

I could mention the ONE sound picture that caused that effect, but we are discussing a color picture, one that convinces you that color is here to stay Warner Brothers wins the cigar!

SOL POLITO photographed "Gold Is Where You Find It,' and ALLEN DAVEY represented the Technicolor Corporation Through the cooperation of these two photographers, we have a picture that gives you all the natural beauty of the scene WITHOUT making you color conscious

High Value All Around

Now you realize why this picture has high photographic, production and audience value, why people in the theatre remarked, "Isn't that beautiful?" instead of, "Isn't that color beautiful?" and "They should have done this a long time ago!"

"Gold Is Where You Find It" runs the gamut of lighting ideas with the freedom of the black and white picture Closeups of the featured players are not lighted with a formula The players pass in and out of many lighting ideas without any disturbance whatever

Night scenes are convincing (one in particular was breathtaking). Late afternoon scenes are true Early morning effects do not need a line of dialogue to put them over to an audience When a scene called for the drab effect, it was drab in all its reality When the script demanded sparkle and brightness, the scene was just that, and the production CUT from one scene to another and from one mood to another without a jar which is generally caused by bad lighting

Mr. POLITO and Mr. DAVEY deserve much praise for their efforts and their accomplishment

▼

SOL HALPERIN has left the hospital and is making rapid strides toward recovery and the process screens at Twentieth

▼

Over at Metro we have JOE RUTTENBERG on "Three Comrades" . . LESTER WHITE doing "Yellow Jack" . . OLIVER MARSH starting "The Toy Wife," and JOHN SEITZ doing "Lord Jeff" . . At Monogram JACK GREENHALGH in "Hiding Gent" At Paramount TED TETZLAFF about to finish "Tropic Holiday" LEO TOVER still on "Cocoanut Grove" . HARRY FISCHBECK in the middle of "The Texans," while CHARLES LANG warms up the crew for "Spawn of the North" . . At R K-O NICHOLAS MUSURACA starts "Blind Alibi" By the way, Nick is getting quite a break in national magazines . I warned you fellows about sending in pictures of yourself in action . Out at Twentieth ROBERT PLANK is winding up Kentucky Moonshine" PEVERELL MARLEY about to finish "Alexander's Ragtime Band" . . ARTHUR MILLER with "Little Miss Broadway" EDWARD SNYDER on 'Racing Blood" . . VIRGIL MILLER starting "Mysterious Mr. Moto" and HARRY DAVIS starting "Handle With Care" . . At United Artists, RUDOLPH MATE is doing "The Adventuress" . . . Out at Universal there is GEORGE ROBINSON on "Sinners in Paradise" JERRY ASH on "Flaming Frontiers" and JOE VALENTINE starting "The Rage of Paris" At Warner's ERNEST HALLER finishes "Four Is a Crowd" and starts "The Comet" . TONY GAUDIO in the middle of "The Amazing Dr. Clitterhouse" and ARTHUR EDESON on "Boy Meets Girl" and "The Chump."

▼

William Koenig, chairman of the Research Council of the Academy, appointed a committee to consider problems in the process photographic field. FAUCIOT EDOUART acts as chairman.

▼

Bouquets and (no) Brickbats from the Press!

Sally, Irene and Mary, Twentieth—"Sparklingly photographed by PEVERELL MARLEY" and "MARLEY'S photography is standard."

Flash Gorden's Trip to Mars, U—"Photography by JERRY ASH is tops"

Jezebel, Warner's—"ERNEST HALLER'S camera gives excellent value to the contrasted moods" and "ERNEST HALLER wields an eloquent camera"

The Crime of Dr. Hallet, U—"Photography by MILTON KRASNER is of high order" and "MILTON KRASNER'S camera is exceptional"

Night Spot, R-K-O—"NICHOLAS MUSURACA handles his camera efficiently" and "Joan Woodbury suffers from lack of photographic quality"

The First Hundred Years, M-G-M—"Piece is well photographed by JOSEPH RUTTENBERG"

Bulldog Drummond's Peril, Par.—"HARRY FISCHBECK is first class as always" and "Photography by HARRY FISCHBECK is well executed"

Condemned Women, R-K-O—"Superior photography is delivered by NICHOLAS MUSURACA"

Maid's Night Out, R-K-O—"FRANK REDMAN and VERNON L. WALKER have used their lights and lenses to the fullest advantage"

Marriage Business, R-K-O—"JOSEPH H. AUGUST'S photography in keeping with the other generally efficient and artistic contributions"

Island in the Sky, Twentieth—'EDWARD CRONJAGER'S photography, especially of Miss Stuart, adds to an eye-pleasing production" and "EDWARD CRONJAGER photographed well"

Mr. Moto's Gamble, Twentieth "LUCIEN ANDRIOT'S photography is tops" and "LUCIEN ANDRIOT'S photography is up to its usual high standard"

The Girl of the Golden West M-G-M—"Special credit to OLIVER T. MARSH for his fine camera prowess."

Rawhide, Twentieth — "ALLEN Q. THOMPSON'S photography is his usual topnotch job."

Fools for Scandal, Warner's—'Highly competent photography of TED TETZLAFF" and "Photography by TED TETZLAFF is excellent"

Bluebeard's Eighth Wife, Par. — "A grand job of photography by LEO TOVER" and "LEO TOVER'S camera is eloquently handled"

Joy of Living, R-K-O—"Photography by JOE WALKER is high class" and "Excellent photography by JOSEPH WALKER"

Her Jungle Lover, Par.—"RAY RENNAHAN'S photography is excellent"; 'The volcanic sequence is executed by GORDON JENNINGS" and "Sharing honors are RAY RENNAHAN and DEV JENNINGS manning the color camera."

Judge Hardy's Children, M-G-M—"LESTER WHITE'S photography added to the merits of the production"

The Rose of Rio Grande, M-G-M—"GILBERT WARRENTON'S photography adds worth to the colorful sets" and "GILBERT WARRENTON'S photography is outstanding"

Battle of Broadway, Twentieth "BARNEY MCGILL'S photography is good" and "Handsomely photographed by BARNEY MCGILL"

(Continued on Page 152)

Low Key Lighting May Be as Easy in Color as It Is in Monochrome

By W. HOWARD GREENE, A.S.C.

LOW-KEY lighting has always been a favorite means of increasing the pictorial and dramatic effectiveness of motion picture scenes. And now that so many important productions are being photographed in natural color, cinematographers are learning that low-key lightings can be even more effective in color than they are in black-and-white.

What is more to the point, we are all of us learning that low-key lighting in color is every bit as easy and as practical as in monochrome. I think the somewhat common misconception that such is not the case can be traced to the limitations under which the Technicolor process operated when the three-color process was first introduced.

At that time limitations in both printing and laboratory processing definitely restricted the range of visual brightnesses which a cinematographer could attempt to record on his negatives.

Moreover, the lighting equipment then available was by no means satisfactorily efficient. Much of the spotlighting equipment then used dated back to the pre-talkie days of orthochromatic film and "hard" light, and a further serious shortcoming lay in the lack of adequate medium and low powered spotlighting units.

Effects Range Limited

The only possible course was to lay a good foundation of general lighting—for which Mole-Richardson had already developed Side Arcs and Scoops—and to build up key and modeling lighting as best one could with the obsolescent sun arcs and rotaries which were all we had to use for such service.

Under such circumstances it was often necessary to use more light and more lamps than were truly desirable. This inevitably limited the range of effects which could safely be attempted.

I do not think it has been adequately brought out that Technicolor cinematography at that time stood at about the same relative stage of development as did sound back in 1928, when only a scant handful of talking pictures had been made.

Progress in sound came only as experience brought forth improved equipment and techniques. During the last year progress in color cinematography has been advanced in the same way.

From the cinematographer's viewpoint one of the most notable advances has been in the development of a line of truly modern lighting units. As soon as the first pressing need for modern general lighting units had been met with the side arcs and scoops, Mole Richardson engineers, in cooperation with the Technicolor staff, turned to the development of a full range of modern arc spotlighting units.

The spotlights now used on Technicolor sets are markedly in advance of the types most frequently used on black-and-white productions.

Ranging from a handy little 65-ampere spotlight up through the 90-ampere H I arc and the 150-ampere Ultra H I arc, all our modern units are based on the same Fresnel-lensed optical system used in the familiar incandescent Solar spots.

One Displaces Two

Their beams are smooth, precisely controllable, and flexible. They burn steadily and quietly. It is a fact that where at the time we made "Becky Sharp" and "Trail of the Lonesome Pine" we would use two lamps, today we need use but one. This in itself broadens the range of lighting effects a cinematographer can use.

An equal improvement has been made in the laboratory treatment of Technicolor film, and especially in the printing methods. These advances have been made in an infinite number of details—too many to be discussed here—and the cumulative effect is that the laboratory is able to use lighter, more normal nega-

(Continued on Page 151)

W. Howard Greene, A.S.C. (standing behind camera), with Sol Polito, A.S.C. (kneeling in front of camera), filming a scene for Warner Brothers' Technicolor production "Robin Hood." Still by Mac Julian.

Farnham and Associates Honored by General Electric Subsidiary

RALPH E Farnham, well known to the technicians of Hollywood as a representative of the General Electric Company, together with two of his fellow-workers, Robert E Worstell and Frank E Carlson, have been honored by the Charles A Coffin Foundation, established by General Electric, with a recommendation for an award

The three men named are affiliated with the company's Nela Park engineering department of the incandescent lamp division They are commercial engineers on lighting for photography and projection. In the official announcement of the Coffin Foundation it is declared

"Through marked originality and high technical competence in the development of scientific and engineering apparatus Messrs. Farnham, Worstell and Carlson have made a contribution beyond that normally expected from those engaged in commercial engineering service to customers and in the promotion of wider application of lamps.

"Notable products of their close collaboration include the microphotometer; a novel and greatly superior type of optical bench; the flashometer, the synchrograph and the flashograph.

"The really unique laboratory they have created has enabled them to deal much more fundamentally and fully with determination of service requirements, specification of needed sources, development of related optical equipment, and the checking of lamp performance.

"They have accomplished marked savings in cost and time The technical staffs of leading consumers come to Nela Park to use these superior facilities, thus adding to General Electric prestige The company has acquired a commanding lead in bringing out improved lamps for the several services, it has been enabled to standardize a smaller number of lamps and thus to derive greater profit, and consistently to enjoy more than a normal share of business from these markets."

The conclusion of the recommendation also sets forth

"It is seen that these developments have provided facilities of great value at small cost Further, that they are characterized by efficiency and economy in operation More important, they have multiplied the effectiveness of commercial engineering activity in a rapidly growing field. They have made it possible to obtain more complete knowledge and have contributed broadly to product development, manufacture and sales."

Ralph E. Farnham
Photo by A Briscaloff

Microphotometer

The microphotometer is described by the foundation as the first high-precision apparatus for measurement of very low values of candle power—less than 1/1 millionth. It embodies automatic recording of measurements and quickly scans beams in steps of less than 1/1000 by 1/1000 inch

Particularly is it valuable in development of lamps and optical systems for the uniform brightness essential to high fidelity sound recording and reproduction, also for picture transmission and reception It has resulted in substantial improvements in the design of General Electric lamps for these services and concentrated demand on a few standard types It is more direct, technically more adequate, and far lower in cost than the alternative of working with complete recording and reproducing apparatus

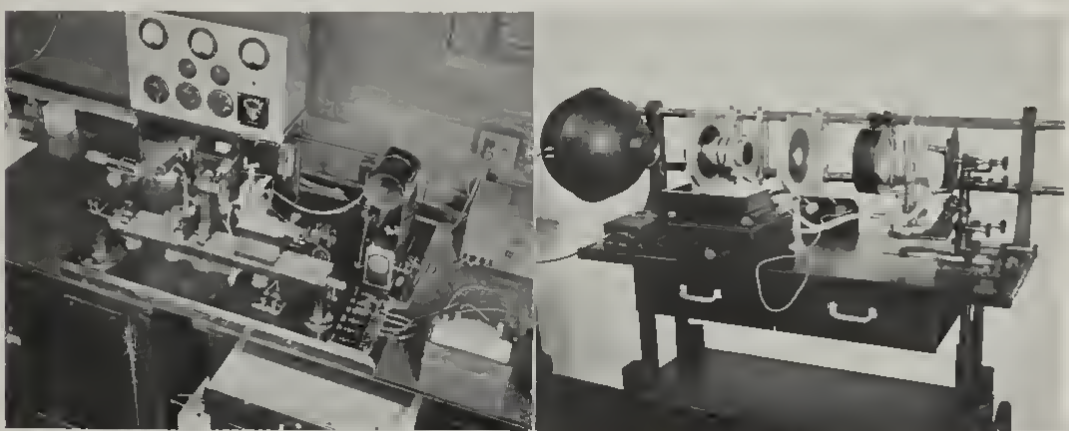
Sound engineers have spent weeks at Nela Park utilizing this equipment in prosecuting their own developments

Optical Bench

The superior optical bench is declared to be highly flexible, reducing by two-thirds the time required for testing of projection lamps and optical systems as compared with conventional apparatus. Elements of novelty include (1) Side mounting on graduated bars leaving unobstructed vertical space for all elements

(2) Accurate, automatically-aligning holders, adaptable to complete range of

(Continued on Page 174)



Left—The microphotometer, a new high-precision apparatus for measuring very low values of candle power—less than 1/1 millionth. Right—Superior optical bench, highly flexible, reducing by two-thirds the time required for testing of projection lamps and optical systems as compared with conventional apparatus

Frank Capra and Norman Alley are A. S. C. Guests at Gettogether

ANOTHER unusually enjoyable evening marked the March get-together of the A.S.C. on the 28th at the home of the society. Joseph Walker, A.S.C. was master of ceremonies. The opening speaker was Frank Capra, president of the Academy, who was given a hearty welcome.

The chief interest of the members in Mr. Capra, however, was on account of his work in the direction of some of the major subjects that have gone out of Hollywood in recent years. Among these need be mentioned here but two, and these from an entertainment standpoint placed at the opposite poles—"It Happened One Night" and "Lost Horizon." But the two just go to demonstrate the versatility of the man.

At the close of the talk and when all questions had been asked and answered, and all the questions did not originate in the audience—the director asked a few on his own account—the chat simmered down to one major fact. Plainly the success of Frank Capra has been due to his regard for preserving and defending illusion, keeping beyond reach of interfering or disturbing devices the main thread of the story as he conceived it.

Norman Alley, famous newsreel man whose work in China attracted international attention when he climaxed his stay in that country by making a pictorial record of the bombing and sinking of the United States ship Panay, was the second speaker. He brought with him a couple of rolls of film which spoke for themselves and for the genuine dangers that accompanied the man who put those scenes on the film.

The films eloquently told several stories, too, more than the unspeakably inhuman bombing of non-combatants, of women and children, none of them was more evident than that the speaker had maintained in his fidelity to his work all the best traditions of the newsreel cameraman—he had faced the hazards and he had brought home the pictures.

EASTERN HEADQUARTERS FOR THE CAMERAMEN

SERVICE — CAMERA REPAIR WORK BY EXPERT TECHNICIANS

RENTALS — CAMERAS — ACCESSORIES

SALES — LIGHTS LENSES BLIMPS • DOLLIES

FRANK ZUCKER

CAMERA EQUIPMENT INC

1600 BROADWAY AT 48TH St. CIRCLE 6-5080 CABLE CINEQUIP.

FAXON DEAN

INC.

CAMERAS

BLIMPS-DOLLYS

FOR RENT

MO. 11838

4516 Sunset Boulevard Night, No. Hollywood 1271

THE BERNDT-MAURER CORP

112 East 24th Street New York City

UP TO THE MINUTE

Berndt-Maurer, pioneer in the development and manufacture of commercial 16 mm. High Fidelity Sound-on-Film recording cameras and equipment, presents a newly established B-M division

PRECISION

FILM LABORATORIES

equipped for every 16 mm. requirement with—

Automatic film processing

Sensitometric control

Cinex timing

Complete air conditioning

Optical and contact printers for 16 mm. to 16 mm. and 35 mm to 16 mm sound and picture

Cutting and editing rooms

16 mm. and 35 mm. projection theatres

which enables B-M to provide a complete, unified and up-to-the-minute service for the producer of commercial 16 mm. sound films in the advertising, sales and educational fields.

An illustrated brochure of B-M equipments and services will be sent upon request. A 16 mm. demonstration sound film is available to responsible parties.

BERNDT-MAURER PRECISION FILM LABORATORIES

21 West 46th St. • N. Y. C.

Reeves Resumes Active Control of Hollywood Camera Supply

ART REEVES has resumed active interest in the Camera Supply Company of 1515 Cahuenga avenue, Hollywood, dealing in rentals and new and used motion and still picture professional and amateur equipment. The building, which is owned by Reeves, has been thoroughly renovated and decorated as well as enlarged by the addition of a finely lighted office in the rear. The addition gives the store an area of 3250 square feet, the largest space devoted to any similar store in Hollywood.

For several years the owner has given his more or less entire attention to the business known as Art Reeves' Motion Picture Equipment, now in new and enlarged quarters at 7512 Santa Monica boulevard, where it is doing a fast growing international business.

Gordon Bennett, the new manager of the store, has had a wide photographic background on the Pacific Coast during the last twenty years. Having been a newsreel cameraman he knows many of the difficulties that all photographers encounter. Also Bennett has had many years' experience in catering to the photographic trade.

One of the first steps he has undertaken is the listing in plain and understandable figures all the items in the wide stock carried by the house.

The store is equipped with two darkrooms, one on the main floor chiefly for demonstration purposes, although entirely practical. In this room an inquiring customer may see for himself a stock of material which will be required to equip such a place in his home or on his grounds and with a comprehensible idea of the amount of space and cost required to install such a plant.

Also there is another practical darkroom in the large basement, which will be for the general convenience of customers who have a brief job of loading or similar work to do.

Camera Supply will carry the Univex line of equipment. "I intend to do my part," declared Reeves in explanation, "to keep the photographic business in photographic stores. Yes, and I shall continue to maintain with this business the international touch that always has marked my manufacturing of developing machines and sound and laboratory equipment and accessories."

VARIRAY BLUE SEAL RECORDING

NEW VARIRAY RECORDING GALVANOMETER

- Variable Area.
- Noise Reduction Shutter
- Noise Reduction and Lamp Control Panel.
- High Quality Optical System.

Complete, ready to install $750 net

Blue Seal Sound Devices, Inc.
723 Seventh Avenue New York City
Cable Address Soundfilm

SALES RENTALS SERVICE DOLLIES BLIMPS SOUND EQUIPMENT

EASTERN REPRESENTATIVE FOR MITCHELL CAMERAS AND ACCESSORIES

J BURGI CONTNER

FEARLESS PRODUCTS HARRISON FILTERS ARRO LIGHTS

MOTION PICTURE CAMERA SUPPLY, INC.
723 SEVENTH AVENUE, NEW YORK, N.Y.
BRYANT 9-7755 • CABLE: 'CINECAMERA'

Literature on request

COOKE LENSES
FINEST CORRECTION
FINEST DEFINITION
FINEST NEGATIVES

BELL & HOWELL COMPANY
Exclusive World Distributors of Taylor Hobson Cooke Cine Lenses
1848 LARCHMONT AVENUE CHICAGO
New York Hollywood

Eliminate Spill Light Use

KEG-LITE
(2000 watt spot)

Equipped with
LEAK-PROOF LENS

Bardwell & McAlister, Inc.
MOTION PICTURE ELECTRICAL EQUIPMENT
7636 Santa Monica Blvd.
Hollywood, California Tel. HOllywood 6235

Agfa Issues Its 35mm. Supreme in Spools, Press in Rolls and Packs

IMPORTANT news to all users of 35mm miniature cameras is the announcement that Agfa Supreme, the fast panchromatic film recently introduced, has been made available in cartridges, spools and darkroom loading packages. Although a new product, exceptional recognition has already been given to this film, for Supreme, together with Agfa's new Ultra Speed Pan, is the first film in seven years to win the motion picture industry's highest honor, the Class I award for technical achievement of the Academy of Motion Picture Arts and Sciences.

As supplied for 35mm still cameras in spools, new type reloadable cartridges and in darkroom loading bulk lengths, the new film will be known as Agfa Superpan Supreme and will replace the Fine Grain Superpan formerly supplied. Until new cartons can be provided, Superpan cartons bearing the label "New Type" or "Supreme" are being used and can be identified as containing the new Superpan Supreme.

Grain Has Not Suffered

Many technical advantages are provided in the new Superpan Supreme. Speed has been increased approximately one hundred per cent, making the film twice as fast as the Superpan it replaces.

Agfa's exceedingly fast Superpan Press emulsion has received such wide attention in the short time it has been available in cut film that its maker has introduced a similar film for cameras using rolls or packs. Also named Agfa Superpan Press, the new film supplied in roll and film pack form is four times faster than any panchromatic film of the supersensitive type previously available.

Color sensitivity of the new film is of the balanced panchromatic type, while the contrast is of normal brilliance. Surprising as it may seem, grain size of the new Superpan Press Roll and Pack film has not suffered by the advance in light sensitivity, and in fact is, if anything, slightly finer than previous supersensitive films.

Agfa Ansco advises that care should be taken in the use of the film not to give too much exposure. Two lens stops less exposure should be used than would be given a panchromatic film of the supersensitive type. Handling and developing of the film should, of course, be done in total darkness.

In roll film, the new Superpan Press will be available in A8 (same size as 127), B2 (same size as 120), PB20 (same size as 620) and PD16 (same size as 616). Superpan Press film packs will be supplied in 6 by 9 cm., 3¼ by 4¼ inch, 9 by 12 cm. and 4 by 5 inch sizes.

Superpan Press cut film is now being supplied in several sizes including 6.5 by 9 centimeters, 2¼ by 3¼ inches, 2½ by 3½ inches, 11 by 14 inches and 12 by 20 inches. Standard sizes continue to be available.

Ampro's 1938 Catalog

The Ampro Corporation, 2839 North Western avenue, Chicago, has produced a colorful catalog of its entire line of silent and sound projectors.

The new catalog is well illustrated and presents a text book arrangement of all models.

—: RENTALS - SERVICE :—

MOTION PICTURE CAMERAS - BLIMPS - DOLLIES AND ALL ACCESSORIES

HIGH-SPEED CAMERAS HIGH-SPEED MOTORS MOTOR EYEMOS

LANDERS & TRISSEL, Inc.

PHONE HE-2277 — 6313 SUNSET BOULEVARD, NEAR VINE STREET, HOLLYWOOD, CALIFORNIA — Night Landers HE-1311 Trissel - No. Hol, 5992W

Good Earth

Dead End Wings Over Honolulu

A Star Is Born

All of the Academy selections for the Best photography of 1937 used Mole-Richardson lighting equipment.

MOLE-RICHARDSON CO.

941 N. Sycamore Avenue, Hollywood, California

Mole-Richardson (England), Ltd., London, England
Mole Richardson (France), Ltd., Neuilly-Sur-Seine, France
Motion Picture Lighting & Equipment Co., New York
Bombay Radio Company, Bombay, India
H. Nassibian, Cairo, Egypt

Friad Laboratory Equipment

35MM 16MM COLOR
Printers Color Continuous, Step, Optical
Lite Testing Machines Developing Machines

FRIED CAMERA CO.

6154 Santa Monica Blvd., Hollywood, Cal.
Cable: FRIEDCAMCO

MUST SACRIFICE

DE BRIE SUPER PARVO

New Type Ultra Silent Camera— No Blimp Necessary

Has built-in meter, automatic dissolve, pilot pins and anti-buckling device. Four 1000-ft. magazines—40 mm. 50 mm. and 75 mm. F2.3 lenses—Mitchell tripod. De Brie upright finder, set of front attachments. Leather covered carrying trunk and tripod cover. It's the latest type equipment. Like new!

Camera Equipment, Inc.

1600 Broadway, New York City
Tel. Circle 6-5080, Cable: Cinequip

Low Key Lighting

(Continued from Page 146)

tives, and to give better, more uniform prints

It was my good fortune to photograph "A Star Is Born" just as these improved methods were being put into practice, and to reap the benefits of having my release prints made by the improved methods.

As a result I was able to go farther in the direction of low-key lightings than had previously been advisable in color filming. The mood and action of the story also favored low-key treatment, and I had the good fortune to be working with a director and a producer who appreciated the dramatic value of such camerawork.

The result was that for many of my effect lightings I found myself approaching parity with the lighting levels and balances the average monochrome cinematographer would use for the same scenes. Since then, not only I but many other cameramen who have made Technicolor productions have been able to advance still nearer monochrome standards.

In producing any type of effect lighting in modern Technicolor, the photographer can light his action much more flatly than he would find necessary in black-and-white. In color, of course, one has actual color contrasts to give separation, where in monochrome such separation to a great extent must be achieved by lighting contrasts. With the advantage of natural color contrasts, lighting contrasts are not nearly so necessary.

Same as Black and White

It must be understood that this flatter lighting is achieved exactly as one would do it in monochrome. The days when the flatter lighting of a color scene required a forest of side arcs on the floor and row after row of scoops overhead, giving an almost characterless, shadowless lighting, are definitely and permanently gone.

Instead, the flatter—or to be exact, the softer lighting, is achieved by economizing on the number of sources used and by restraining the amount of back and rim lighting used.

Furthermore, we can now use smaller units. Where a few years ago we would have to use, say, a 90-ampere H. I. arc we can now use a 65-ampere unit. Where in "Becky Sharp" we would find a big 36-inch sun arc necessary we can use a 150-ampere Ultra H. I. arc, or even the 90-ampere unit. On many occasions we have made close shots in which we found only a side arc necessary as a key light.

Similarly, the amount of general lighting needed for color scenes has reached virtual parity with the best practice in black-and-white. The forest of overhead scoops which once characterized Technicolor sets has disappeared. The only time I used these units on "A Star Is Born" was on a few large sets and for occasional filler service in cramped quarters.

In low-key monochrome scenes it is often very effective to have relatively strongly lit actors moving in front of a dark background. This effect is even more striking in color, for the natural coloring of the players' complexions and costumes furnishes a striking natural contrast with the dark background. A sure way to make any color stand out vividly is to play it against a dark background.

Advantages in Color

In making such scenes in monochrome we would ordinarily use at least some back lighting to give a sharply defined separation between figure and background. In Technicolor the natural color contrast does this for us.

Cinematographers long have realized that one way to correct undesirable tonal contrasts in a set is to keep the light away from the disturbing area. The effect is even more marked in color. The extent to which set coloration can be controlled by lighting is a constant surprise to newcomers in color camerawork.

A normal illumination level will give a normal color rendition, as the illumination is lessened, the color grows darker and less obtrusive, until, if all light is excluded, even a brilliantly colored area can appear virtually black. In this connection the Fresnel-lensed M-R spotlighting units are most helpful, for their construction completely does away with spilled light.

Balancing shadows in Technicolor is no more of a problem than in black-and-white. Generally speaking, one will get better results with a slightly smaller range between highlight and shadow illumination levels than would be the case in monochrome, but with this slight modification, the balancing of illumination is closely the same.

In fact, as one eminent monochrome cameraman recently remarked, between the more efficient lighting equipment used for Technicolor and the more natural lightings possible, modern color cinematography is actually simpler than black-and-white.

In closing, I would like to take this opportunity of expressing to my fellow-members of the A.S.C. my appreciation for the Academy color award which their votes brought me, and to the operative crew — Arthur Arling, operative; Nelson Cordis, technician, and Thad Brooks, assistant—who worked so splendidly with me in making the picture which won the award.

Complete Studio Equipment
KRUSE
Camera Rentals
HI 4464 — HI 8144
1033 N. Cahuenga — Nite MO. 13470

Camera Supply Co.
OWNED AND OPERATED BY
ART REEVES
Meet the Staff for Efficient, Courteous Service
Gordon Bennett—New Manager
Hal Harms—Photographic
Roy Vaughan—35mm Equipment
EVERYTHING PHOTOGRAPHIC
PROFESSIONAL AND AMATEUR
NEW AND USED EQUIPMENT
BOUGHT, SOLD AND RENTED
CAMERA SUPPLY CO.
HOLLYWOOD — 1515 North Cahuenga Boulevard — CALIFORNIA
Cable Address—Cameras

What About Me?

(Continued from Page 145)

Port of Seven Seas, M-G-M—"Exceptionally good photography by KARL FREUND" and " is especially indebted to KARL FREUND for exceptional photography."

No Time to Marry, Columbia—" and tastefully photographed by AL ZIEGLER."

Penrod's Double Trouble, Warner's—" . . . and ARTHUR TODD'S photography leaves no room for improvement."

▼

John Arnold has assigned LEN SMITH to take a month's training at the Technicolor plant in preparation for "Northwest Passage" ERNEST HALLER has been assigned to photograph "Comet" for Warner's HAL ROSSON draws camera assignment on "Shopworn Angel" at Metro JOHN ALTON hies himself back to South America to work for the National Films of Argentina . . . Technicolor signs for six pictures at M-G-M KARL FREUND goes to Universal.

▼

My assistant says

That it's bad business to forget the star's name and call her something else

Now that the Academy has given its award and the excitement is all over, we can all settle down to the starting mark for the statue that is to be given away free for the best photographed picture of 1938. It just seems like there is never any peace. We are always competing for something whether it be with the traffic or the 60 per cent margin of profit at the racetrack. Hi-Ho! It certainly is tough!

Research Council Names Process Field Committee

THE research council of the Academy of Motion Picture Arts and Sciences has appointed a committee to consider problems in the process photography field which have arisen during the near past.

Recent improvements in technique of background photography in the studios have necessitated the development of new arc carbons and lamp and projection equipment. Some of this equipment, notably a new type process projector, has already been completed and will be tested by the committee.

Other equipment, principally a new type projector lamp and specially designed carbons, is now in process of development, and this committee will coordinate and correlate all of the studio requirements and assist manufacturers in developing satisfactory equipment.

Membership of the newly appointed Process Projection Equipment Committee consists of Farciot Edouart, chairman, J. A. Ball, H. C. Bishop, Jack Burroughs, Ganahl Carson, Merle Chamberlain, Jack Cosgrove, Arnold Gillespie, Charles Handley, Ralph Hammeras, Winton Hoch, Stanley Horsley, Fred Jackman, Wallace Kelley, H. F. Koenekamp, Robert Layton, William Miller, Elmer Richardson, Roy Seawright, W. B. Slaughter, George Teague, William Thomas, Vernon Walker, Frank Young, and the manager of the council.

. . . CINEX . . .

- Light Testers—Polishers used by all major studios. We are the Sole Mfrs. and Distributors
- Mfrs. of 16mm. and 35mm. Recording Heads, Amplifiers, Developing Machines, Printers, Etc.

CINEMA ARTS—CRAFTS
914 N. Fairfax HE-1984 Hollywood, Calif.

REPRESENTATIVE
or Distributing Sales Agency
WANTED
on West Coast

by world-famous manufacturers of precision photographic and projection lenses that include objectives of every type for every amateur and professional still and cine requirement.

Must be in regular, close contact with photographic dealers and motion picture studios. Address communications to Box 213, American Cinematographer, 1782 North Orange Drive, Hollywood, California.

MOVIOLA
FILM EDITING EQUIPMENT
Used in Every Major Studio
Illustrated Literature on request
MOVIOLA CO.
1451 Gordon St. Hollywood, Calif.

FILM TESTED

Automatic Developing Machines
Soundolas
Sensitesters
Reeves-lites
Variable Density Sound System
Variable Area Sound System
Microphone Boom
Sound Accessories
Laboratory Accessories

ART REEVES
MOTION PICTURE EQUIPMENT
Cable Address: ARTREEVES
7512 Santa Monica Blvd. Hollywood, California U. S. A.

EASTMAN SUPER X NEGATIVE

J. E. BRULATOUR, INC.

Filmo ACHIEVES THE ULTIMATE!

S-L-O-W MOTION IN COLOR

THAT *is* a camera achievement—and Filmo does it so perfectly. On both 8 millimeter and 16 millimeter film, Filmos make incomparably fine color movies, even in slow motion.

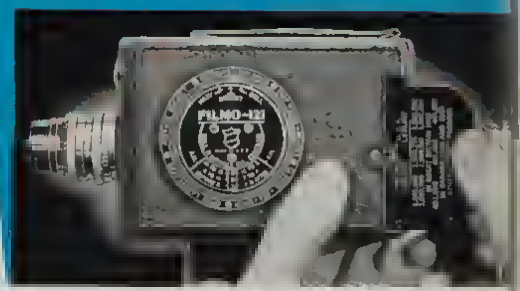
Taylor-Hobson lenses, fully corrected for both black-and-white and natural color photography, shutters which give uniform exposure over the entire picture area, and smooth-running, precision-made mechanisms, with governors which provide constantly correct speed, combine to produce steady, sharply defined, brilliant motion pictures in true-to-life color

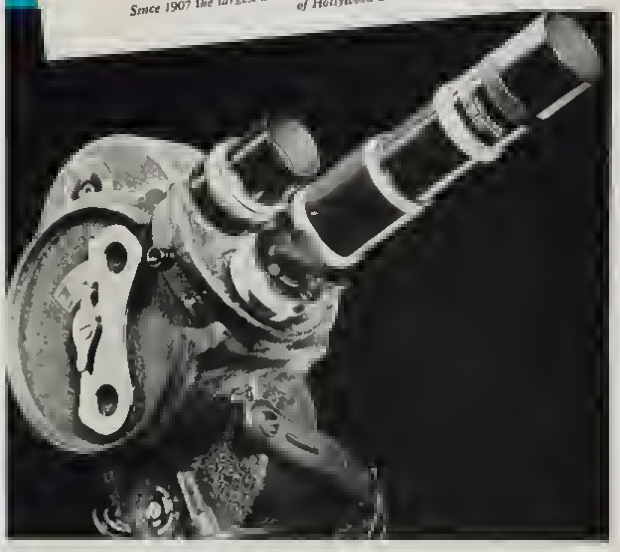
There is a wide range of Filmo Cameras for you to choose from All are made to the same standards of accuracy that have made Bell & Howell for more than 31 years the largest manufacturer of precision equipment for professional motion picture studios. To help you decide *which* Filmo, mail coupon below for information

BELL & HOWELL COMPANY

CHICAGO • NEW YORK • HOLLYWOOD • LONDON

Since 1907 the largest manufacturer of precision equipment for motion picture studios of Hollywood and the world





FILMO 121—*16 mm. Magazine Loading* The perfect "casual camera for week-end movie making Loads instantly with self-threading film magazine permitting the interchanging of black-and-white and natural color film—even when film in magazine is only partially exposed. Finest F 2 7 Taylor-Hobson Cooke lens—produced by the makers of Hollywood's most popular lenses. Features include both spyglass and waist-level viewfinders, speeds of 16 and 24 frames per second, and single-frame device for animation work. Easy to carry, easy to use Only $85; With F 1.5 focusing mount lens, $139.

FILMO DOUBLE 8

This 8 mm. camera has everything! Instant loading—film literally drops into place Taylor-Hobson F 2 5 lens, interchangeable. Automatically reset film footage dial. Four speeds [illegible], your choice of two speed ranges . . plus single-frame exposure device for animation work Built-in spyglass viewfinder with masks for telephoto lenses. With speeds 8 to 32, $80 Speeds 16 to 64, $85. Model 134-G, with F 3-5 lens, only $55.

FILMO 70-D—*The Master of All Personal Movie Cameras.* The Filmo 70-D stands unrivaled in the 16 mm. motion picture field. Compact, light in weight, versatile, this finest of all personal movie cameras provides seven film speeds (including slow motion), a turret head for quick lens changes, and a wide variety of optional accessories, all instantly removable without tools, such as an electric motor drive, external magazines holding up to 400 feet of film, and other equipment to add novelty and variety to your personal films. Send the coupon for complete details.

CASTLE FILMS—*Complete Stock in Chicago* Bell & Howell Filmosound Library makes immediate shipment, *from Chicago stock*, of the popular Castle Films—news, sports, travel, old-time movies, and screen magazine Each subject offered in five versions—16 mm. sound, 16 mm and 8 mm. silent complete, and 16 mm and 8 mm. short "headline" editions Send for lists of current releases

BELL & HOWELL COMPANY AC A-38
1848 Larchmont Avenue, Chicago, Illinois
Please send me information about ☐ Filmosound Projectors, ☐ Filmo Silent Projectors, ☐ Filmo 8 mm Projectors, ☐ Filmo 16 mm Cameras, ☐ Filmo 8 mm Cameras, ☐ Filmosound Library

Name

Address

City State

BELL & HOWELL

American Cinematographer Amateur Movies Section

THE MOVIES THAT BLOOM IN THE SPRING

PRACTISED movie-makers know that spring offers great opportunities for really worthwhile outdoor shots. And they've learned that the way to make the most of those opportunities is to use Hypan . . . the film that's *especially* designed for *outdoor* use.

BRILLIANCE...SPARKLE...SNAP! Hypan is unbelievably brilliant, and it brings you sparkling screen results with added snap and luster. It is fine grained and fully panchromatic. Hypan's speed in daylight is approximately that of the famous Agfa Superpan Reversible.

For movies as bright as springtime itself, use Agfa 16 mm. Hypan Reversible Film. It comes in 100-foot rolls at $6.00, and in 50-foot rolls at $3.25. Prices include processing and return postage. **Made by Agfa Ansco Corporation in Binghamton, New York.**

AGFA

HYPAN FILM

Agfa

AMATEUR MOVIE SECTION

SOCIETY OF AMATEUR CINEMATOGRAPHERS

BOARD OF REVIEW

Victor Milner, President, A.S.C., Director of Photography Paramount Studios, Academy Award Winner 1935

Karl Struss, A.S.C., Director of Photography Paramount Studios, Academy Award Winner 1928

Fred W. Jackman, Treasurer American Society of Cinematographers

Dan Clark, A.S.C., Director of Photography Twentieth Century-Fox

Tony Gaudio, A.S.C., Director of Photography Warner Brothers Studio, Academy Award Winner 1937

Contents....

It ain't gain' to rain no more 158
By George Blaisdell

Color in broadcasting studied by Hollywood Television Society 160
By William Laughton Prager

Phototours to Europe will mark innovation for amateur filmers 161

Micro Movies most efficient research tool 162
By Dr. Paul A. Zahl

Tales of Sea lead program at Littles' Sixth Evening 164

European product Eumig C4 8mm camera enters American market 166

Notes of the movie clubs 167

Stanley and Maryjane Bean tell of making scenario films 169
By Mr. and Mrs. Bean

Three Cinematographer Awards on International Show Program 170

Legibility and pictorial value lead desirable title qualities 171
By William Stull

Good program at well attended Ninth Movie Party 174

Helm invents portable cinema testing set-up 175

Eastman makes enlarger for 16mm frames 176

It Ain't Goin' To Rain No More

By GEORGE BLAISDELL

THE troubles of the sound man are without end. Over at Universal studio those in authority pretty well know what to do when a flock of none too high-flying giant bombers goes sailing overhead or a division of fire apparatus screams along Lankershim Boulevard just in front of the lot. But an operating pile driver right out on that same boulevard almost in front of the studio entrance was something else again. That was one that was not in the book.

On the late afternoon of March 19 this writer with a camera made a visit to some of the devastated spots in North Hollywood, formerly Lankershim, a perfectly good name altered for obvious reasons to the present geographical misnomer possibly by little "realtors" who aspired to become big "realtors."

But wrongly or rightly named, the town was hard hit by flood waters that streamed down from the nearby hills. A couple of exposures made at the site of the Lankershim Bridge are reproduced here. These will show not only one item of the general wreck but also will indicate the amount of hammering that took place while that temporary bridge was being built.

A few days earlier the writer had stood on the studio side of the young chasm while the pile driver was in operation. At every one of the rapidly repeated blows the ground would shake like a distinct tremor of a developing earthquake.

Over on the studio lot James Whale, among others, as it afterward was told, was directing a picture for Universal. Whale decided to take half a loaf. Stationing a man at the front of the studio where the finish of the driving of each log could be seen through a series of signalers word was conveyed to the director.

Cameras would be started until word came that another log was set for driving. Then work would cease until the last of the rapidly repeated blows had been delivered.

Nevertheless a pile driver seems to have been something new in the handicaps experienced by a sound man in a West Coast studio.

▼

GEORGE A. BLAIR, sales manager of the export motion picture film department of the Eastman Kodak Company, with offices in Rochester, was a visitor to the editor at the end of March. The occasion served for the renewal of a friendship that has extended across twenty-six years.

George Blair is one of the veterans of the Eastman Company. Since his youth he has been continuously on its roster—and for many years one of its more popular executives. During his service with a domestic department of the company there were no functions related to the film business in any part of the United States at which he was not present as a representative of the Rochester concern.

He always was the perfect company ambassador—just as he is today. He brought favorable attention to the corporation he represented not because he discreetly exploited it or even mentioned it. Rather it was because in mingling with him his friends new and old unconsciously bestowed on his company the regard they felt for him personally.

Mr. Blair came into Los Angeles on the wave of the flood, so to speak. Anyway, he came in from Barstow, quite a bit out, by bus instead of on the customary rails. But presence of wind and rain and absence of bridges leave this Rochester man serene and unruffled.

During the all too brief visit of George Blair in this office there was talk of old friends who have signed off and of merry moments with them when they were in the life. Just as good-byes were said at high noon the visitor remarked on the balmy day—"at last." Then he told about getting word from home that on one recent day the temperature in Rochester—not so very many miles from the Canadian line—stood at 83 degrees.

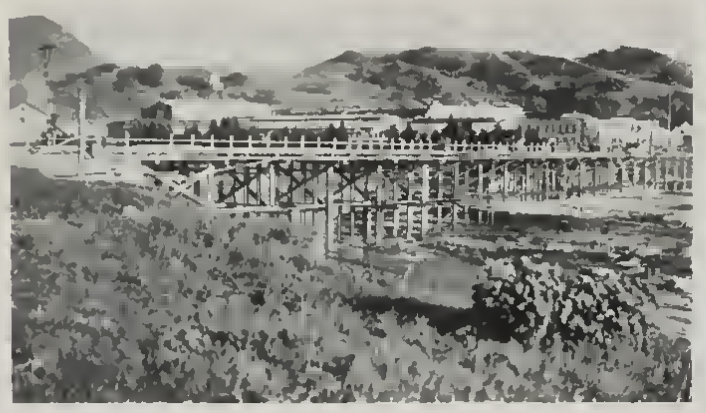
But that is George Blair. He always leaves with you something to think about, to remember him by.

There really was basis for the intimation that temperature in Los Angeles has not been so "hot" recently.

▼

AT LAST the camera tourist is coming into his own. No longer will he be an object of condescension, tolerated rather than welcomed, by the majority of his personally conducted "party." No longer following a slight delay caused by refusing to pass up a

In these snubnun pictures will be found a suggestion of the havoc wrought at the door of the Universal studio in North Hollywood—and also of the number of piles necessary to sink into the earth in order to create a temporary bridge for heavy traffic. It was something new in the way of handicaps for sound picture makers, while on signals that the pile driver was about to start its earth-shaking blows all work would stop until the particular stick had been sunk to its destination. Aside from that cost of time and frayed nerves the only expense to Universal that shows on the books were ten or a dozen acres washed down the river and several sets that were knocked cock-eyed, a damage at least of $50,000. That old expression of "washed its shores" may be employed here—for the Universal property for many hundreds of yards was quite thoroughly "washed" by the Los Angeles River when it shifted from the non-existent to the flood stage.



shot he just had to have will he be compelled to run himself breathless through crowded streets to catch up with the fast traveling non-camera addicts

Everything is going to be all right now There will be a Fototour. In fact, there will be two Fototours One will be through the Scandinavian and Baltic countries and the other through England, Holland, Belgium, Germany, Switzerland and France

Each will be in charge of photographers, each one of whom, it may be suggested, seemingly will be well qualified to make good on his particular job. One ordinarily is official photographer for a university medical school, and presumably may be immune to questions and conclusions that would administer a severe jolt to one less hardened. The other leader also is a lecturer as well as a photographer and therefore should be reasonably well trained not only in the art of answering with rare skill but actually "ducking" questions that only an amateur advanced in ways that are dark and tricks that are vain—sometimes—may propound

We suggest as a part of the advertising campaign the sponsors announce that tripods may be taken along—and that there will be opportunities of using them to the advantage of the tourist's product.

Little Chance for Tripod

Let us refer to the experiences of an American woman last year when she tried to make pictures while a member of a personally conducted party of ten, of which it may be mentioned she was the only one packing a camera—and that one a cine camera

In summing up her adventures on her return she called attention to the fact that many tourists grabbing a shot here and a shot there made sudden decisions and there was no time to set up a tripod if she planned to remain with her companions The latter would be well in advance of her even if she made a quick exposure without benefit of tripod.

On one occasion the ship stopped twelve hours while the tourists did a seventy-five-mile bus jump into the interior. The only concern of the drivers was to get their passengers to their inland destination as quickly as possible and again return them to the ship so there would be margin for delays that could not be anticipated Exceptional locations were passed on the highways, but to the demands of the amateur cinematographer that she be allowed to record them on film her only response was a shake of the head, cold-bloodedly negative

On a Fototour, too, it may be possible to disregard advice that hitherto has seemed sound — not to carry a still camera if toting a cine There could be specially planned cine trips and still trips, and on some occasions there could be combined cine-still sessions.

It is of added interest to note that on the outward bound journey of the liner there will be instruction in exposing still and cine film and on the homeward bound instruction in development, enlargement and cine film technique

There is a suggestion that as an outcome of the tours there will be a selection of the better photographs for the purpose of sending them on a visit to the principal cities

Of course, it is possible this touch of exhibitionism may not appeal to the Fototourists We will venture to assert, however, it is exceedingly improbable It has been our experience that if any engine of restraint has been created that will stop a photographer from displaying his wares to all and sundry wherever found the fact has not been made public

▼

RAYMOND GARNETT, chairman of the board of Viking Films Ltd of London, was a visitor at the office of the Cinematographer at the end of the month Mr Garnett is on his way home to London following a tour to South Africa and Australia with the British rifle team Last year at Bisley in the Empire match the Australians beat the British on their home ground This year at Sydney, with its team of fourteen contenders, the British turned the tables They scored 23 points' margin over Australia and 56 over South Africa

The visitor was pulling out for the Grand Canyon and Chicago the morning following the visit He had tried to obtain some supersensitized plates while in town, but the best answer he could get was that even if he were in Rochester these probably would have to be made up for him

It should be explained Mr Garnett is an enthusiastic amateur still photographer His enthusiasm extends to the light meter, to its value to the photographer, to the surety and protection it bestows when properly interpreted upon the product as well as upon the man behind the camera And it is his experience and the result of his observation that the value of the meter extends to major professional work as well as to the less ambitious efforts of the amateur

It was quite apparent to the editor in the course of an enjoyable chat that Mr Garnett is a staunch admirer of the many sided ability of his associate in Viking, Eric Humphries—who brings to his work of producer and director an expert technical knowledge of sound and cutting and knowledge of other factors that enter into the making of a motion picture

●

THROUGH the courtesy of the Radio Vision Corporation of America The Cinematographer is privileged to print this month two photographs of that company's new television color camera This is the first time pictures of it have been reproduced in a public manner Owing to the diagrammatic treatment of the photographs the halftones will be of unusual interest to professionals and amateurs alike. The pictures are on Pages 160 and 161 accompanying an article written by William Langton Prager

THE Journal of the Motion Picture Society of India calls the attention of its readers and incidentally at the same time also of a wider audience to the injury it believes is done to India and its people by reason of "anti-Indian films which chiefly emanate from Hollywood" These, the Journal declares "have become a perennial source of danger to the honor and prestige of our country and her people

"Enough has been written estimating the enormity of the harm done through this effective and yet subtle medium of the celluloid in these columns as also in the general and trade press throughout the country"

The president of the MPSI, Sir Phirose Sethna, in his effort to prevent the continuance of pictures which the more thoughtful of his countrymen declare to be a libel on India has written to the Secretary of State in Washington In that communication the society's president declared

"There are fewer topics which have of late been agitating the public mind and the motion picture industry in particular than the systematic and invidious propaganda recently carried on by the Hollywood producers in making pictures either wholly anti-Indian or partly so

"When one contemplates how the U S A has been benefiting from contact with India in respect of motion pictures the injustice done to India through such sinister propaganda becomes all the more glaring and inexplicable"

President Sethna says if there prove to be no relief from the situation complained of India will be "reluctantly forced to resort to more effective measures, which assuredly will bring about a lot of preventable unpleasantness in their wake"

While England in a minor way is included in the protest lodged by motion picture followers in India, nevertheless the major complaint is against picture-makers of the United States A large percentage of the offending producers are without the rolls of the organized companies They are independents without a release and of course with no particular responsibility to anybody

It is regrettable any agency claiming United States citizenship should give offense to a country at the hands of which the people of this nation have reaped undoubted benefit through the sale of equipment and the distribution of films There are plenty of moral reasons why the greatest of the picture-making countries should throughout the personnel of its film industry make every effort to deal fairly and squarely with the people of all nations

There are even more reasons why films originating within the United States should deal fairly with India India is more than a consumer of our goods It is a great country It is more than a vastly populated country It is a country rich in tradition and in culture—from the store of which waiting to be tapped there must be abundance of entertainment and indirect education for the rest of the world

Color in Broadcasting Studied by New Hollywood Television Group

By WILLIAM LAUGHTON PRAGER

ALTHOUGH June 29, 1936, marks the initial experimental broadcasting of television in America, this year 1938 will go down into history as the beginning of regular sight and sound programs in this country. In the East CBS is broadcasting from the Chrysler Building daily and likewise NBC from the Empire State Building.

Both are telecasting direct images and indirect, or motion picture film, at the standard sound speed of 24 frames a second. This standard has been established by the Federal Communication Commission, approving the essentials of 441 line definition and a video and audio carrier wave spacing of approximately 3.25 megacycles.

Not to be overlooked is the advancement made by the Farnsworth Corporation in the outskirts of Philadelphia. They broadcast daily both direct and indirect image.

Here on our West Coast the Don Lee Broadcasting System is a source of television broadcast, having been televising off and on for several years indirectly from black and white motion picture film and daily since the first of the year.

Local Society Active

Although not strictly adhering to the standards as established in the East, its experimental station W6XAO furnishes data for the construction of a cathode ray tube receiver designed to receive its visual images on 45,000 K.C. (6.2.3 meters) and the sound accompanying the images on the companion ultra high frequency of 54,300 K.C. (5½ meters).

The Hollywood Television Society membership has under construction several receivers of this type, for at the present we are limited to the use of this television program alone. But with the completion of the National Broadcasting and Columbia Broadcasting Systems' new studios, together with its respective television facilities, here in Hollywood, this community will likewise become the television center of the world.

Home Made Equipment

Due to this activity along the road to television perfection in the East, radio amateurs on the 5 meter and other bands allotted to them talk of nothing else but television. It is anticipated that much toward the perfection of television will come from the efforts of these very same amateurs in building up their "home made" equipment to receive the sight and sound programs.

It is the mastery of the ultra high frequencies that is bringing television within the area of practical use. Research is steadily pushing forward into the higher regions of the spectrum, which but yesterday constituted a radio desert, and which today promise the telecasting of objects in their natural hues, either by direct or indirect pick-up, then will television be acclaimed the major of the visual arts, which at this time includes direct ocular vision and still or motion picture photography.

William Langton Prager

For example, let us compare television with the human eye and motion pictures, of which television is a direct blending.

Television and the Eye

Without memory our eyes would be of little use. Duration of the envisioned picture depends upon the brain to remember. With the motion picture, on the other hand, we have a permanent pictorial record, the silver image in the emulsion on the film representing the stored memory.

Television, oddly, is either transient or permanent, depending upon the mode of use: the direct electrical pick-up, or an indirect motion picture, either providing the television memory.

Direct vision is color vision. Similarly, motion pictures can be either monochromatic or in color, be it two color or more. Likewise with television, the theory of which is based upon the conversion of light frequency to electrical frequency in the "camera" or pick-up, and its reconversion by a receiver.

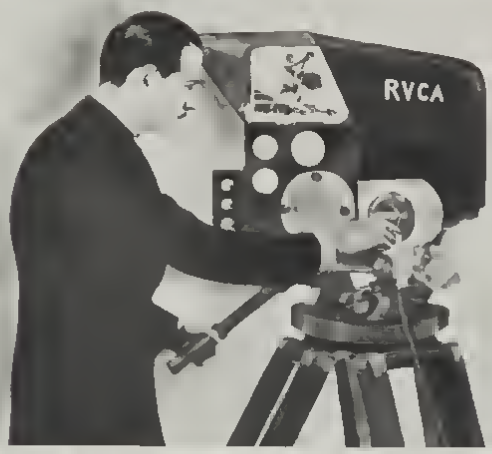
By referring to a chart of the ether spectrum we readily see that

Red has a frequency of 7000 angstrom units.

Yellow has a frequency of 5890 angstrom units.

Blue has a frequency of 4500 angstrom units.

The human eye can detect but from 4000 to 7000 angs or the equivalent of the rainbow spectrum of seven colors and their immediate blending, but the photo-electric cell can detect colors ranging from 2000 to 8000 angs wave length of which over 18,000 distinct renditions are detectable. By the use of a spectro-



[illegible] the last word in radio television camera [illegible] and broadcast on other radio or television wave length
([illegible] Radio [illegible] Corporation of America)

scope these are visible to the human eye Each of these colors has its monochromatic value in a degree of gray, to which the "color camera" converts it in a "negative" value for amplification and broadcast at a wave length of

.00008 cm. for red.
.00006 cm. for yellow.
.00004 cm. for blue,

employing a conversion factor of $1x10^{11}$ (one with eleven zeros).

The converted "negative" color wave lengths are mixed on a "beat" circuit of greater than 60,000 K. C which brings the wave band pointing below the corresponding 5 meters, and at less than one meter, pointing toward the future employment of the higher regions of the spectrum

The reception of the color image is a direct reversal of the method of preparing the picked up image for televising the receiver acting as an "unscrambler" and placing the same upon a fluorescent plane of the otherwise black and white cathode tube

With the coming of colorvised television, which will greatly be enhanced by the use alone of natural color motion pictures for indirect program release, we can truly say that jointly motion pictures and television will come into their own, neither one supplanting the other but together advancing the enjoyment of the art of vision as granted us humans by "the God of things as they are"

Fototours to Europe Will Mark Innovation for Amateur Filmers

PHOTO tours through picturesque and historic Continental nations, a departure in European travel, will be undertaken next summer, giving the amateur cine camera and still fans opportunities to pursue their hobbies under the most favorable and interesting circumstances

New trails and old will be blazed on these tours B E Mickelelt, official photographer for Harvard University Medical School, will lead a group through England, Holland, Belgium, Germany, Switzerland, and France. Gordon Bennett, authority on photography, world traveler, lecturer and writer, will lead other amateurs through the rugged Scandinavian Peninsula and the Baltic countries

The purpose of these tours, the first of their kind ever seriously attempted, is to make it possible for amateur photographers to go in groups to the points of major interest in European countries and receive expert instruction and direction when desired

Also, full cooperation from camera and cine organizations in the countries visited is expected This will make it possible for amateurs of the United States to compare notes at first hand with photo experts in the main cities of Europe Contacts with the European amateurs already are being established by William M Barber of Babson Park, Mass, who is in charge of all arrangements

Seven Weeks' Tour

Highlight of the Scandinavian-Baltic Tour begins in New York July 2 and ends in the same city August 19 An extension tour to Belgium, Holland and France winds up in New York two weeks later.

The basic tour, which begins in New York July 8, includes calls at Galway, Cobh and a day at historic Stonehenge, three days in London and excursions into rural England. Also there will be two days in The Hague, visits to Amsterdam and Marken, a swing through Belgium and four days in Paris

This trip will end in New York August 5, but unlike most tours the actual interest of the amateurs will continue because exhibitions of the best photographs taken by members of any of the tours will be held The first exhibition will be in New York, and subsequently the superior pictures taken by the amateurs will be displayed in other cities

Several supplementary tours are planned for those who desire to visit additional countries where superb photo subjects abound

Instruction by expert leaders for those who desire it will be given for both cine work and the taking of stills on the liner going to Europe On the return liners, they will give instruction in development, enlargement and cine technique

Industrial Research Labs Revising Its Bulletin 91

The increase in the number of research laboratories maintained by industrial concerns in the United States during the last few years has made it seem desirable to issue a new edition of the National Research Council's Bulletin, "Industrial Research Laboratories of the United States," fifth edition

On March 25 questionnaires were mailed to the 1562 concerns which were included in the last edition of 1933 and to a large number of new concerns which are thought to maintain laboratories

If the reader of this note is a member of a firm which maintains a laboratory where research looking toward the development and improvement of products is carried on, it is hoped he will ascertain whether a questionnaire has been received by his company, and if not that he will request one from the Library, National Research Council, 2101 Constitution Avenue, Washington, D C

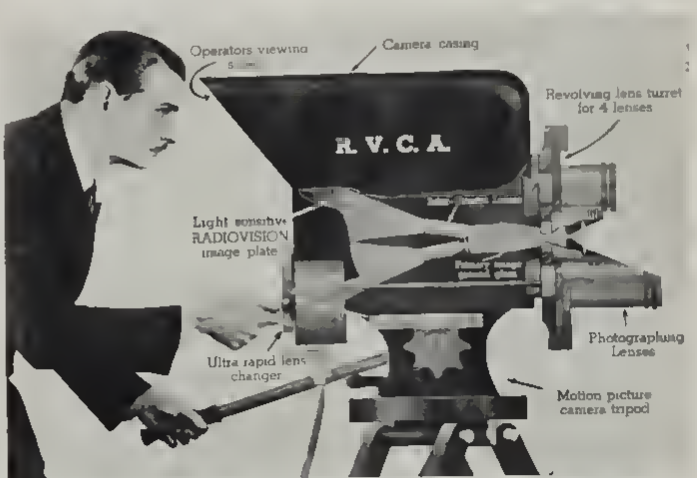
There is no charge for the entry in the bulletin, the only requirement being that the laboratory is undertaking research

It is desirable to have the information for the bulletin in hand as soon as possible so that the publication may appear within the current year

Hypan in 50 Feet Reversible

Agfa Hypan reversible motion picture film is available until further notice and on special order in 50 foot cassettes for the Siemens Halske 16mm movie camera The film, which is a fast pan chromatic material giving pleasingly brilliant results, is processed at no charge by any authorized Agfa reversal laboratory.

It may be obtained by ordering through any photographic dealer



Note automatic ultra-rapid lens changer, film automatic radio finding
Courtesy Radio Vision Corporation of America

Micro Movies Most Efficient Research Tool

MODERN science turns the movie camera on a set where the principal actors are living cells and temperamental molecules. Sometimes they behave nicely, sometimes they become obstreperous, sometimes wild and raving. Sometimes they must be "made up" to show to best advantage on the screen. Let a "movie director" tell the story of his pictures, his studio, his lighting problems and his actors. His "location" is the stage of a high-powered microscope. His leading actors are dancing molecules of HOH and Ba($C_{36}H_{70}O_4$)$_2$. (On location they are called water and barium stearate.) But before going on location let us see what the other "studios" have done and are doing.

By DR. PAUL A. ZAHL

The Haskins Laboratory, Schenectady, N. Y.

THE use of micro movies in the research laboratory is not new. Often deep in the abyss of a microscope, protozoa, cancer cells, growing nerves and fertilized egg cells have heard the click-click of a shutter at the distant end of the microscope. In the case of actively moving protozoa in good light the movie camera is run at the old regular silent sixteen-frames-a-second rate.

In the case of slowly changing cells or slowly growing nerves, and particularly when extreme magnification must be used, a very simple and now common cinematographic device is employed.

Who has not seen "trick" movies of a flower suddenly breaking into bloom? It's the same idea only applied to a microscope system in which the light source and the shutter control are carefully synchronized. Suppose a living nerve cell in a tissue culture is moving at about the same rate as the hour hand on a small wrist watch. This is imperceptible to the eye.

A nerve cell is very small, and even if the most powerful light concentration obtainable is focussed directly on it, when viewed through the series of ten or fifteen lenses which comprise the modern high power microscope, the image of the cell isn't what one would call ideal for movie photography.

But the difficulties of slow movement and insufficient illumination are overcome with one stroke of engineering genius. The light source and the camera mechanism are synchronized in such a way that when the former flashes on, the latter opens.

Photographic Nerve Cell

Now suppose it is desirable to photograph the growth of a nerve cell over a period of 24 hours. The camera is set so that the light goes on regularly every two minutes, and synchronously the camera shutter opens exposing one frame for possibly three seconds.

This three-second exposure takes care of bad illumination. In the course of 24 hours 720 frames are exposed. Finally, when we project these 720 frames at normal speed one gets the illusion of the continuous and regular growth of the nerve cell.

The whole showing of this 24-hour growth period takes about 45 seconds.

Well, such movies are comparatively simple to make and the method has been in use for a number of years. But how about the molecules?

Recently we encountered a knotty problem which we solved only after considerable grief by the application of some possibly new photographic angles.

We start with a slide of chromium which had been polished as highly as the modern rouge technics would permit. On one half of this highly polished surface we apply a layer of barium stearate exactly one molecule thick, and which of course is invisible.

This rather remarkable achievement of being able to deposit a single layer of molecules is made possible by the application of a technic devised by Nobel Prize Winner Dr. Langmuir.

Influence of Barium Stearate

Now as one breathes lightly on the cool chromium thousands of very tiny droplets of moisture condense on the surface. When studied under the microscope the droplets on the pure chromium surface are altogether different from those which condense where the monomolecular layer of barium stearate is.

In the latter case the droplets are round, hemispherical and very small. Where there is no barium stearate they are very large, irregular and flat.

That sounds like a simple and unim-

Right—Dr. Zahl and equipment used to get high speed micro movies of materials which must be viewed by overhead rather than by the usual transmitted light. Left—Breathe on some cool metal. Then examine the surface under a high-power microscope. You'll see something like this. Each of the circles is a water droplet several thousandths of an inch in diameter.

Print made directly from strips of 16mm. film. The circles and irregular figures are of various types of water droplets, changes in which the movie camera records.

portant observation, but if one stops to consider what is actually happening when water is condensed on a surface one sees that he is dealing with fundamental forces which when fully understood may have wide application.

When one breathes on the slide, a stream of water molecules in high motion bombard the relatively more stationary chromium molecules of the slide. Some of the water molecules (for unknown reasons) stick to the chromium molecules and they draw other molecules to them.

After several million molecules have aggregated in one spot the droplet becomes barely visible under the microscope. This same thing happens on the chromium where there is the layer of barium stearate molecules, except the droplets when they attain visibility are of different shape and character.

What causes the barium stearate molecules to condense the water molecules in a fashion unlike condensation on the bare chromium?

That is a problem in pure molecular physics and cannot be dealt with here. In trying to solve that problem, however, it was necessary to get movies of water droplets as they grow out of invisibility into microscopic visibility. And the problem of getting those movies is what we shall deal with here.

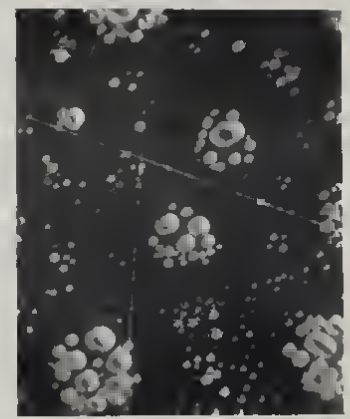
What Makes Molecules Behave

When we got the movies it was our idea to project each frame singly on the screen as a still and take measurements such as diameter of droplets, contact angles, etc.

From a series of hundreds of such measurements on different frames one-sixteenth of a second apart mathematical calculations can be made which clear some of the mysteries enshrouding forces which cause molecules to behave as they do.

But first the movies had to be got. Since the chromium slide was opaque, light could obviously not be transmitted from underneath as in the case of most micro preparations. A strong beam of light shot directly on to the slide at a glancing angle was tried, but the growing water droplets merely reflected the light source as points, and through the microscope one had the impression of looking down on a field of sparkling diamonds. Such a glittering field was pretty but useless for our purposes. Furthermore, such light was too hot.

We next tried all the standard devices for overhead illumination — the Silverman lamp, the Epicondenser, the Spierer



Chromium surface which has been treated in certain areas. When water is condensed on the surface these areas show up conspicuously.

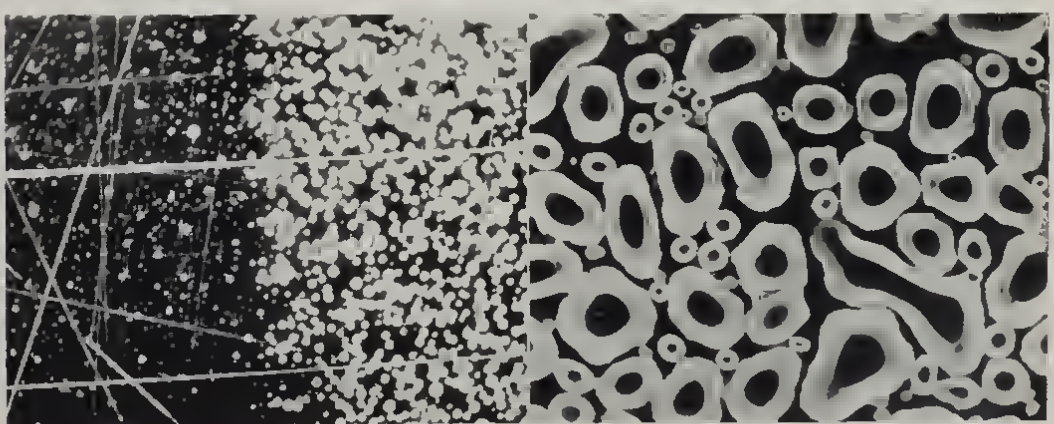
lens, the Ultropaque. The latter seemed to give us what we wanted. The ordinary Leitz Ultropaque gives one an adjustable cone of light falling on the object at an angle of 90 degrees.

The objective penetrates the cone perpendicularly and directly in the center. The water droplets when viewed through the Ultropaque appeared each as a circle of light. This was fine because from this we could take the measurements we wanted.

Final Not So Easy

But the final difficulty wasn't so easy. It centered around the fact that the movie camera had to be running at a rate somewhere between 16 and 64

Left—This is a photo of a chromium surface shortly after moisture has been condensed on it. On the right hand side where the droplets are larger the surface had been coated with three invisible monomolecular layers of barium stearate. On the left only one layer had been deposited. Why do the water droplets differ on both sides? That's what the scientists are trying to find out. The accompanying article tells how they use movie technic in their quest. The streaks are "scratches" on the supposedly perfectly polished surface. Right—If the surface of the chromium slide is absolutely clean and free from all contamination the condensed water droplets take on a peculiarly irregular shape.



frames a second, and not at the intermittent rate previously described for taking the growing nerve cell

To take micro pictures at this rate, even on the most sensitive emulsions, requires brilliant illumination The usual source of illumination used with the Ultropaque is a built-in, low wattage lamp

At the magnifications we were using one could barely see the field, let alone take rapid movies So we procured what is called a bullseye condenser which fits as a side arm on to the Ultropaque Into this bullseye we fed a condensed beam of light coming from a special micro lamp with a 500 watt filament Now when the light from a 500 watt filament is concentrated to a point, that point is really bright, and also hot

It was necessary to keep heat off of our water droplets So the beam of light was cooled by passing it through a column of air, into the bullseye condenser, through several pairs of circular prisms, and finally down on the object — where it came out cool

Now having solved the illumination problem we combined the camera and microscope so as to make a complete unit A Leica Ipso attachment made it possible to view the object while actually taking the pictures For movie equipment we used an ordinary 16 mm Bell and Howell

When using such an arrangement as this it is necessary that the camera have no actual contact with the microscope The vibration of the camera mechanism makes the finished movie when projected have the St. Vitus dance to a superlative degree.

No Lens in Camera

No lens was used in the camera, the ocular of the microscope serving the purpose To be sure that the micro image was focussed directly on the camera film sluice, the light was turned on, the camera opened and a piece of wet tissue paper slipped into the film sluice This acted as a ground glass upon which actual focus could be made

Thus with a heterogeneous assemblage of material we got the movies we wanted There was a Bausch and Lomb micro lamp, a Spencer microscope, a Leitz Ultropaque and Ipso attachment a Zeiss ocular, A Bell and Howell camera and Eastman film

When such movies are projected at normal rate one sees at first nothing but a dark field Then one sees infinitely small stars beginning to twinkle against the blackness These are in the order of one fifty thousandth of an inch in diameter

Slowly they grow to become hemispherical or irregular droplets of possibly one five hundredth of an inch in diameter We reverse the action of the projector and slowly they decrease in size and disappear beyond the limits of microscopic visibility

Then we stop the mechanism and project only one frame We go to the screen and carefully measure the diameters of all the droplets in the field We turn to the next frame and repeat the measurements and continue thus until we have data on all the droplets on all the frames

The movie camera has served its purpose It has given us quantitative data which is now ready for mathematical analysis

Tales of the Seas Lead Program at Littles' Sixth Film Evening

THE sixth and thus far the most outstanding of the subscription series of Motion Picture Evenings sponsored by Mr and Mrs Duncan MacD. Little and Thomas H S Andrews was held March 5

"To the Seven Seas" was an extremely interesting film of not noteworthy photography, accompanied by a running commentary of high adventure Two American college students who gave up collegiate life to answer the call of the sea and a young London bank clerk sailed from New York in January, 1935, through the canal and by way of the Galapagos—Fiji, Samoa, Tahiti, the Marquesas and many other lesser known islands—to the Philippines and China, where their adventures came to a sudden end in Peiping due to the war

They added several hitherto unknown and uncharted islands to the map and had all sorts of experiences, which lost nothing by the informal manner of the telling.

At the outset they were accompanied by a professional cameraman, but "life on the ocean wave" proved too much for him and he left the expedition at Panama From then on these boys had to be their own cameraman, and not one of them had ever before shot a foot of film Even on occasions they were forced, for climatic reasons, to process their own film Considering all facts their results are highly creditable

"In from the Sea" is a forthright and interesting documentary film The musical accompaniment is excellent, and this, with the recorded sounds of shipyard activities, make it an outstanding film

"The Plow that Broke the Plains" calls for little comment It appeared to have been cut at the end, omitting what had been thought to be outright propaganda If so it was improved—for the message that was conveyed needs no artificial build-up

Some thirty-three subscribers attended, and all voted the program a success. After the usual refreshments, followed by general discussion of the films exhibited, of "Snow White" and George Pal's "Puppettoons," which had just been seen in New York a few days before, the Evening ended

The program for the Seventh Evening of the series, to be held April 9, will be the films to be exhibited at the International Amateur Movie Show to be presented at Columbia University on April 6, as an integral part of the Motion Picture Parade This program is being arranged for the division of film study by Mr Little

Agfa in 1938 Will Spend Record Sum in Advertising

AGFA Ansco Guaranteed Film will be promoted in 1938 by the heaviest national consumer advertising schedule ever adopted for it, the corporation announces In addition, camera dealers will be given unusual opportunities for profits through three sales-building assortments

Ten national magazines with a total circulation of more than 17,000,000 will carry full page Agfa Ansco advertisements during the year. They are Saturday Evening Post, Collier's, Life, National Geographic, American, Cosmopolitan, Redbook, Liberty, Esquire and Fortune.

In addition, there will be a full year-round advertising schedule in all the leading photographic magazines devoted to advanced amateurs and professionals

30 Cents from Amusement Dollar Is Spent on Movies

MORE than 29 cents out of every amusement dollar in American villages goes to the movies, if a study of family living in 140 villages recently made by the Bureau of Home Economics of the Department of Agriculture is a criterion.

In these villages, chosen as representative American communities, 9407 families gave detailed accounts of amusement expenses for a twelve-month period during 1935-6 to field agents working under the direction of the Bureau of Home Economics

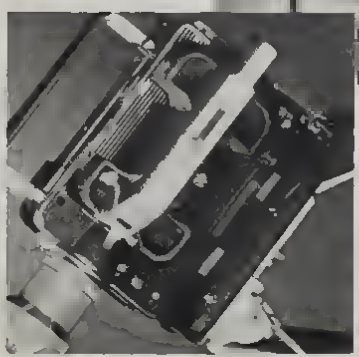
New England villagers spent 30 cents of every amusement dollar for movies In the Pennsylvania, Ohio, Michigan, Illinois, and Iowa villages studied, 29 cents from each amusement dollar took some member of the family to the movies The popular modern entertainment drew 30 cents out of each amusement dollar in the villages of Kansas, North Dakota, South Dakota, Colorado, and Montana

The Pacific Coast villagers spent 29 cents of each amusement dollar for movies In the Southeast, the white families channeled 36 cents of each amusement dollar into the picture show box-office, and the Negro families 37 cents

A NEW ACCESSORY

THE FOCUSING FINDER FOR MAGAZINE CINÉ-KODAK

ADDS CRITICAL ACCURACY AND GREATER VERSATILITY TO OPERATING EASE . . .



● ABOVE *The filmer is preparing to make a close-up of a goldfish using Magazine Ciné-Kodak and its 2-inch telephoto lens. He is looking through the eyepiece of the Focusing Finder which is in position in the camera, and is focusing the lens. The camera is on a Cine-Kodak Tripod—for which an adapter base for Magazine Cine-Kodak is available. For light, he is using Kodaflector, Eastman 85 reflector and Photoflood lamps. On the shelf are magazines of Kodachrome Film, Type A for Photoflood, and the Compartment Carrying Case for Magazine Cine-Kodak and extra lenses.*

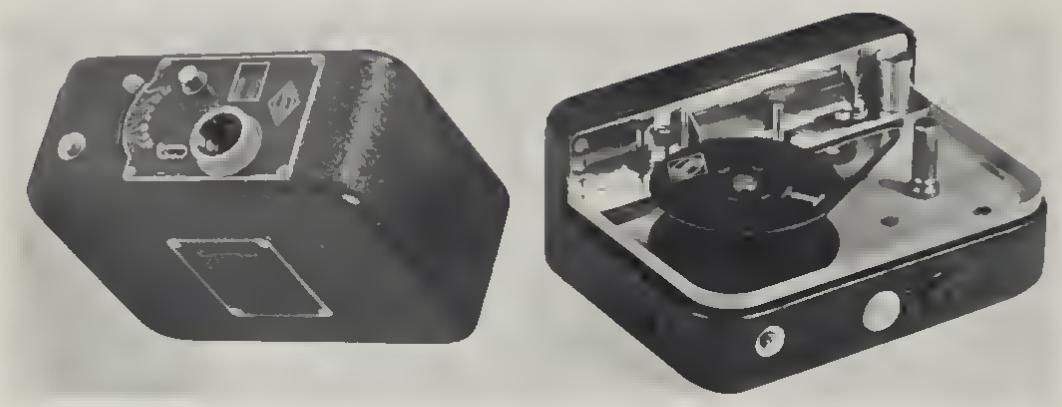
● LEFT *The Focusing Finder is shown in position in the Magazine Cine-Kodak—it is slipped into and out of the film magazine chamber in seven shots.*

IT'S effortless loading and its great versatility have won thousands of enthusiastic users for Magazine Ciné-Kodak. Loading in three seconds with film packed in light-tight metal magazines, with three speeds, fast 1-inch *f* 1.9 lens, and seven interchangeable accessory lenses—ranging from 15 mm. wide angle to 6-inch telephoto—it's the ideal camera for the more advanced filmer. This scope is now further increased through a new accessory—a reflex Focusing Finder for Magazine Ciné-Kodak.

This finder adds to magazine-loading and interchangeable lenses, two more important features characteristic of the professional motion picture camera—positive precision focusing and visual determination of field covered by the lens. These advantages are especially desirable for close-ups, telephoto shots, and in titling. The Finder is slipped into the camera in place of the film magazine, between shots, and is effective with any of its eight interchangeable lenses—and at any distance. Of cast aluminum, weighing 8½ ounces, the Focusing Finder for Magazine Ciné-Kodak is $20.

Whether your filming plans are making simple personal records—or more ambitious productions—you won't outgrow the Magazine Ciné-Kodak. Through a full line of precision accessories, it will keep in step with your increased demands. See this remarkable camera, its accessory lenses and the Focusing Finder at your Ciné-Kodak dealer's.

EASTMAN KODAK COMPANY, ROCHESTER, N. Y.



Eumig C4 8mm. camera closed and opened

European Product Eumig C4 8mm. Camera Enters American Market

A DISTINCTIVE new 8mm camera, powered by a self-contained electric motor, has recently appeared on the American market. Known as the Eumig model C4, it has scored a decided success among European amateurs, and bids fair to do the same among American cinefilmers.

The distinctive feature of this camera is the fact that it is driven by a midget electric motor, power for which is supplied by a 20-cent flashlight battery. The battery used is either a standard Ever-Ready No. 1289 or a Burgess No. 532.

The makers claim each battery will expose at least 10 double-run 8mm rolls before needing replacement. At this figure it is understood to have a reserve of 100 per cent. In the event the camera is not used with reasonable frequency it is recommended that the battery be replaced every six months.

Since the Eumig camera eliminates not only the bulk and weight of the conventional clockwork motor, but also the physical stresses involved in winding a heavy spring, the C4 achieves compactness and lightness notable even in 8mm equipment. The camera is box-form, and measures 4¾ by 4¾ by 2¾ inches, and weighs, complete with battery, 1 pound 6 ounces.

Mechanism Ingenious

The camera is made in three sections: the main body and two sliding covers housing, respectively, the battery and motor on the right, and the film-moving mechanism on the left. These compartments are light-tight and independent of each other, so that batteries may be changed with perfect safety regardless of whether the camera is loaded. The camera case is diecast metal, in black crackle finish with chromium plated fittings.

The film moving mechanism is ingenious. The feed spool is held on a non-rotating spindle and feeds the film over a relieved idling roller into the film channel. The film is moved by a single spring-loaded claw located above the aperture. The pressure plate is completely removable and is held in place by a flat steel spring bearing against a stationary post.

Below the gate is a small post with two serrated rubber flanges positioned to align with the sprocket holes of the film. It is claimed that, if for any reason the pull on the take-up should become too strong, the lower loop would pull up against these rubber flanges, the serrations of which would engage in the perforations and act as shock absorbers to prevent the pull from being transmitted to the film in the aperture. Due to this construction the gate pressure has been reduced to a minimum.

The take-up spindle is of ingenious construction. Instead of using the familiar keyed spindle, the Eumig C4 employs a spindle with an expanding, spring-action skirt which appears to grip the reel quite as effectively as the familiar keyed spindle.

The camera is fitted with a Berthiot Perlynx lens of the usual 12.5mm. focus and an aperture of f.2.5. This lens is calibrated after the French custom, with the apertures indicated as f.2.5, f.3.5, f.5, f.7, f.10, f.14 and f.20. The lens is of the universal focus type, and is not interchangeable.

One Speed

The Eumig C4 has but one operating speed—16 frames per second. A locking catch directly below the lens serves a double purpose. Placed in the "locked" position when the camera is not running it locks the release, preventing accidental operation.

When engaged while the camera is operating, the same device locks the camera in operation, so that the cameraman may leave it to run itself. A standard American tripod-screw bushing is fitted.

The camera tested by a representative of The American Cinematographer performed excellently. The lens yielded satisfactory quality and definition at all apertures. Tests for steadiness of film motion showed almost perfect vertical steadiness, though a small lateral weave was noticed; the latter was by no means objectionable, however, as it was only discernible in test shots, made from a tripod, of a printed test chart. In hand-held scenes, the steadiness was remarkably satisfactory.

Visual inspection of the running of the camera had given the impression that, under load, it might be a trifle slow in getting up to speed, due to inertia. Actual tests, however, disproved this. Due apparently to the lightness of the moving parts and the minimized pressure of the aperture-plate, the camera came up to speed instantly. There was no observable over-exposure of the first

(Continued on Page 168)

Notes of the Movie Clubs

Metropolitan, New York

The March meeting of the Metropolitan Motion Picture Club was marked by the observance of Guest Night. This meeting was held as a continuation of a custom begun four years ago, of setting aside one night in the year when members could invite their friends to attend a regular MMPC meeting

Originally intended as an evening of entertainment for the guests, the meeting also has come to mean a great deal to members since it gives them an opportunity to compare their own opinions of good amateur films with the opinions of those less concerned by technical details

The program included the screening of "Richmond Under Three Flags," a suave publicity film by Waldo E. Austin featuring some excellent color photography of this leisurely city of the Old South; "Vacation by the Gallon," a sparkling comedy of gasoline touring; and "Redesigned for Living," describing the wonders of orthopedic surgery. This last film was done as a club project by the Cinema Club of the Oranges for use by one of the local hospitals in publicity work

Announcement also was made of plans for the celebration of the tenth anniversary of the Metropolitan Club This will take the form of a Gala Night program to be held April 29 at the Hotel Pennsylvania

For this occasion a program of outstanding amateur films and of speakers well known in both the professional and amateur motion picture fields is being arranged

Similar programs in past years have brought audiences of over 400 New Yorkers interested in amateur films and their production. It is expected this year's program will be superior to any previously presented

Australian Society

The February number of Movie News, official organ of the Australian Amateur Cine Society, gives considerable space to describing a Kodachrome subject shown at the previous meeting, a picture from the camera of A J Perier. The editor of this unusual bulletin, a printshop product, 5½ by 8½ inches and containing eight pages and cover, highly praises the exposure and the quality of the color

Accounting for the latter factor the editor ascribes the difference to a Pola screen used in front of the lens and goes into considerable length to explain why. The photographer equipped with this invention of Edwin H Land will find that he has considerable control over contrasts in his subject, the editor proceeds, "even though he may be unable to change the lighting on his subject. Unwanted reflections disappear. Reflections can be practically removed from glass or water to show detail beyond or below. There are big possibilities in polarized light."

The trophy offered by an anonymous donor for the best film shown in general meeting throughout the year was presented to James A. Sherlock — and it was for "To the Ships of Sydney."

Films taken by members during the Zoo outing as a rule were disappointing, the chief complaint being underexposure. The two exceptions were photographed by Messrs. Perier and Sharp, the former for reasons previously described and the latter for reasons associated with his use of the Smethurst high-light system.

H. Roy Booth was re-elected as president and W. L. Robinson was chosen treasurer. Miss V. Stone will continue as secretary until her departure for abroad in April.

Victorian Amateur Cine
(From Australian Amateur Cine Bulletin)

The Victorian Amateur Cine Society has commenced the New Year well by moving into permanent residence. H. A. Tregellas, who was with us recently, reports that for its new premises the Club is indebted to the generosity of three members, Messrs. V. Alford, W. Kerr and J. H. Jackson, who have agreed to rent the room for three weeks out of four, the Club paying for the fourth week. In addition, they have decorated and fitted the rooms with projection cabin, wiring and lighting, proscenium and screen, etc.

The rooms are suitable for interior work, rehearsals, processing, etc., and are convenient to the city. The officials for 1938 are: President, V. Alford (re-elected), vice-president, C. O. Welsh, honorary secretary, Miss Amatiuda, organizer, W. Kerr, technical adviser and trustee J. H. Jackson (formerly treasurer), committee, H. White, J. Lind, B. Norgate and H. A. Tregellas.

The organizer is responsible for seeing that officials and staff are ready for all functions, outings, films, etc. The technical adviser and trustee has charge of all club property and arranges for the interchange of technical knowledge.

Los Angeles Cinema Club

The regular monthly meeting of the Los Angeles Cinema Club was held at the Bell and Howell Auditorium, Tuesday, March 1. It was called to order by President Gram at 7:30 p.m. Hal Hall spoke briefly on "African Holiday." Fred Champion spoke on demand for educational films. The minutes of the previous meeting were read and approved.

Members were notified that all club owned equipment would be rented for the following charges: Turntable equipment, $2 for the first night and 50 cents a night thereafter; title equipment, no charge for the first two nights and 25 cents a night thereafter; splicing equipment, no charge for the first two nights and 25 cents each night thereafter. All equipment must be picked up from and returned to the technical committee.

Messrs. Mitchell, Pyle, Newmiller and Walker were assigned the test problem for the April meeting.

Dr. Sauerman's film on under and over exposure was projected and followed by discussion. Mr. Wade of the General Electric Company spoke on the new General Electric Exposure Meter and demonstrated its use.

Dr. Sauerman's film, "A Trip to Catalina," and Dr. Bailey's film, "A Dirty Gate" or "Shooting Over the Hedge," were projected for club discussion and criticism. Tracy Hall ran a sample of his Kodachrome taken on his recent trip.

Los Angeles 8mm Club

The March meeting of the Los Angeles 8mm club was held at the Bell and Howell auditorium, March 8.

An announcement was made of a contest to be held in April with worthwhile prizes to be awarded. The length of these films shall be no greater than that which can be put on a 50 foot Eastman reel.

The feature of the evening was a demonstration by Forest Howland of the Dieterich-Post Company. Mr. Howland showed the different sizes and styles of the Wrico Lettering Guide and answered questions pertaining to the cost and manner of using them.

Mr. Blaisdell introduced Hal Hall, who invited the club to attend the local premiere run of Mr. and Mrs. Harry C. Pearson's picture, "African Holiday," which was to start an engagement at the Grand Theatre March 25. The club signified its intention of attending and Mr. Hall agreed to reserve 100 seats for the club at the 9 o'clock show on the opening night.

The Still Photographers' Committee took flashlight pictures of the meeting and also announced that beginning with the April meeting still pictures of each member would be taken before the meeting to be placed on his membership card for identification purposes.

The technical committee had its inning, followed by a short intermission.

The remainder of the evening was given over to the running of members' films and never, other than in contests,

have we seen such a high average of good and interesting photography

The meeting was then adjourned until April 12th at the Eastman Auditorium

BION B VOGEL, Secretary

Philadelphia Cinema Club

The March meeting of the Philadelphia Cinema Club brought to a close the regime of the officers who had been at the helm since the formation of the club, two years ago. These were chosen

President, Ripley W Bugbee, vice president, A L O Rasch, secretary-treasurer, Horace W Wilson

The new officers all were former members of the executive council and also were charter members Mr Bugbee was former chairman of the program committee, Mr Rasch secretary-treasurer and Mr Wilson chairman of the technical committee

The club has reached its constitutional limitation of seventy five members and has eight applications on the waiting list

The meeting was enlivened by a black and white film in 8 mm., by member W. D Coles, covering a trip to Cuba It was Mr. Coles' first offering to the club, and as he explained was prior to his learning that he should not pam Dr Bowersox presented an original 8 mm black and white film backed up by sound entitled "In the Beginning," and based on the book of Genesis. It was well put together, and extremely well received

The local representatives of Bell and Howell put on a complete display of 8 mm and 16 mm projection equipment and cameras, and the members were delighted with the opportunity to examine individually the various pieces of equipment The complete technical staff was in attendance to explain any item desired Their sound equipment was demonstrated with both news reel and entertainment films

For our April meeting we have been able to secure as our principal speaker, Hamilton Jones of Buffalo, whose film "Western Holiday" has received wide acclaim The film also will be shown at that meeting

The second annual banquet of the club, held at McAlister's February 24, was attended by 185 members and friends It was a success from all angles Some of the finest films produced by members were put on the screen for the entertainment of the members Among these were A L O Rasch's "Idle Days," with sound, and Bugbee and Crowthers' "Guatemala Holiday," in color and sound

B N LEVENE,
Chairman Publications Committee

La Casa Moviemakers, Alhambra

Unusual interest was shown at the March meeting of La Casa Moviemakers of Alhambra, Calif, as the uncut film contest awards were given after a showing of the films submitted Fourteen members entered their best efforts and the field was evenly divided between the 16mm and the 8mm

The keen interest in home scenes of Baby and Junior clearly indicated that this is the real field for the amateur

The awards given are as follows "Mother's Little Helper," by T H Herzog, first, "Baby's Birthday," by F J Gaylord, second, "The Day at the Zoo," by R Neiger, third

Honorary award was given to R A Battles for his scenic color film "The Spell of the Desert" Unusual lighting effects and brilliancy were shown in the filming of the desert and canyons in the vicinity of Palm Springs

Last year's prize winners, "Little Sherlock" and "Pinch Hitter," also were run Over a hundred members and guests voted the evening a big success

February 21 an enthusiastic meeting was held by La Casa Moviemakers of Alhambra, Calif The feature was a showing of "Around the World" film by Tracy O Hall, A C L One hundred and fifteen members and guests enjoyed the travelogue A discussion of sound also was held

Unusual interest centered in the meeting held March 21 On this occasion the Uncut Film Contest closed Many amateurs entered their best It was expected color would cut a big figure in this event as now the southwest is at its best in its showing of spring wild flowers Some fine prizes have been offered by amateur movie firms

R A BATTLES, Publicity.

Cinema Club of San Francisco

At the recent meeting of the Program Committee several good ideas for club activities for our members were outlined, among these the making of a club picture, to be in the nature of a semi-news reel, covering San Francisco, its points of interest, transportation, high lights, play spots, etc

The plan is to divide the club into groups of two and assign them to make a certain footage of a subject to be designated later, such as the bridges, the zoo, etc. Bill Palmer will be editor-in-chief and will make the assignments and outline in detail the part each will play in this picture

At the meeting March 29, a pre-meeting will be held at 7 o'clock for those members who care to bring their personal movies for constructive criticism This is a new idea, to get our bashful members to show their films at a preview and later at our regular meeting

Our program this month will consist of a very interesting talk by Joe Rucker of Paramount Sound News Mr Rucker returned recently from China and was with Byrd in the Antarctic

It is hoped also to have several films covering the Panay bombing and war in China so you may know just what took place over there

E G PETHERICK, President

March 22

European Camera Eumig Enters American Market

(Continued from Page 166)

frame of any scene The little motor appeared to hold its speed well.

The motor itself is an excellent piece of mechanism Housed in an inclosed sub-housing measuring ⅞ by 1½ by 2¾ inches, it has a balanced three-coil armature and is shunt-wound It is fitted with a satisfactory centrifugal governor. Semi-permanently sealed in its housing, it should require no more attention than the conventional clockwork camera motors

The finder of the Eumig C4 is also a practical feature It is exactly level with the lens, and displaced to the right only 13/16 inch, center-to-center This should make the correction for parallax in close shots and titles extremely easy

In addition, the finder lens is engraved with a cross in its center, a refinement which should be of considerable value in leveling the camera, in calculating parallax and in following moving action

Using this electrically driven camera can be most interesting to individuals who have had reason to regret the limited spring capacity of conventional apparatus Of course, due to this electric drive few scenes could be too long to film in one unbroken "take," since it is perfectly possible to expose the full 25 feet of a roll consecutively

Actually having this capacity at one's command is a unique experience, and one which can have considerable practical value for some filmers. There is also an obvious advantage in having a camera always mechanically ready for action The safety-catch, however, offers a few initial surprises to one not accustomed to such a safeguard

The possibilities of remote control operation of this electrically driven camera also promise much for some classes of camerawork

In all, the Eumig C4 appears to point the way to many worthwhile developments in the design of amateur cinemachinery It should become quite popular with American amateurdom, as is indicated by the rapidity with which the models initially stocked by the enterprising dealer (Winters, Inc), who introduced them to Pacific Coast cine circles, found their way from dealer to consumer Most welcome is the report that a prominent American camera manufacturer has obtained manufacturing rights to this camera and is planning to manufacture it in America It presages a worthwhile addition to the growing family of the eight

W S.

Pinholes and similar technical defects in negatives can be spotted out swiftly and accurately by users of a new Kodak Negative Spotting Panel just announced from Rochester by the Eastman Kodak Company

The device, useful to camera amateurs who do their own developing, printing and enlarging, is designed for use alone or with the Kodak enlarging focus finder just introduced

Most Successful Celluloid Story Is Founded on the Old Backyard

By STANLEY and MARYJANE BEAN

SOMETIME ago we remember of reading the biography of a famous author whose success was attributed to his writing of people he knew, of the countryside where he spent most of his life, and above all telling the simple stories of these, his people

We believe the success of your story and ours, told on celluloid, is best when founded on familiar soil—in the old backyard

Principally, the amateur field offers most interest to the narrative and travel type film. The settings are permanent and the ideas, simple Occasionally "Copy Cats," like ourselves, become enthused with the idea of producing scenario-films, "just like they do in Hollywood."

The Mister of our family made his first flicker in 1925, a hoss opera The horse was a success! Travel films filled the gap till 1930 when a historical-romance theme was begun Our Merrimack Valley, the most beautiful in the world, was the setting

The finished production resulted in gratifying approval on the part of the Tercentenary Celebration tourists who viewed it as well as local school and college groups

Preserving Illusion

The leading woman married the producer and since then we have been filming a feature-length story each year. We have made a few industrial subjects in between times which have given us much experience with interior lighting

Since 1932 color has intrigued us and this year we feel competent to use it for a feature story, after solving some of the problems of complexion tints and true-blue skies We want color to be natural—adding to the story rather than overwhelming it by shrieking brilliance

Our joy in scenario film making is in creating our own story and bringing it to life on the screen Our story must tell itself chiefly in pantomime with simple explanatory titles to provide the continuity

The players try to interpret the scenes in their own natural way, stressing expression rather than conversation, and really enjoy performing as we enjoy shooting

For 1937, we produced one short film, a modern legend of how color and rhythm were created Two amateurs whose black and white films seem cold and lifeless seek the aid of the dwarf, Jack Frost's Rival, in a far off mountain cave This person possesses the power to put life into stone and color into objects of black and white.

Scenario for Guide

An accompanying feature length film, "Symphony in Hues," done entirely in Kodachrome, compares Man's handiwork with Nature's masterpieces, from the crescent moon to priceless jewels—a dirigible to newly hatched marshhawks taken in their nest, 80 feet above the ground

We do not adhere to our scenarios to the letter because on location new twists suggest themselves which may alter the earlier, mentally pictured scene The scenario is an outline for a central theme our forerunner of assured continuity

We present our new films each year as benefits before civic, church, and school groups Each program aids a worthy cause and also helps us enough to pay auditorium rentals The extra goes toward improvement on our next year's reels.

None of our cinema attempts are "super"—none of our actors are yet eligible to Academy awards The benefits of relaxation from our daily tasks are a reward of inestimable value

Seriously we take the Hollywood cinemas in our theater! And seriously we make our own

New York's Camera Mart Moves to Larger Quarters

The Camera-Mart, Inc. has moved to larger quarters, at 70 West 45th Street, New York. A special feature which the store is sponsoring is an exhibit of still and movie cameras dating back to the earlier times of picturemaking The collection is the property of Irving Browning, illustrative and motion picture photographer

These rare cameras will be on exhibition for an extended period. There will be illustrations, early experiments of pictures in motion, and up to present standards of 8, 16, 35mm negatives and prints by Technicolor and early sound track

Irving Browning will act in advisory capacity for Camera-Mart

[illegible] Stanley and Maryjane Bean, Mr. and Mrs. Consuming [illegible] Haverhill, Mass. [illegible] Kodachrome films [illegible] Lupe Velez and Johnny Weissmuller in Ray Enright's production shown.

Three Cinematographer Awards on International Show Program

Columbia University's Division of Film Study Will Screen April 6 Eight Amateur Subjects from as Many Countries—Kinney Moore, S.A.C., Only American Entrant to Get Nod.

EIGHT different countries will be represented in the International Amateur Movie Show to be given at Columbia University Wednesday evening, April 6, under the auspices of the Division of Film Study of the university, it is announced at Columbia.

They are Japan, Australia, Germany, Canada, Scotland, England, Czechoslovakia, and the United States.

In the eight pictures selected are three which won awards in the recent contest conducted by The American Cinematographer—"To the Ships of Sydney," "Mount Zao" and "Prize Winner."

A prize-winning film from Poland has been sent, according to a letter received from an amateur society in Warsaw, but has not yet been received. Pictures were also promised from Austria and from Spain, but events in those two countries made it necessary for the amateurs interested to write that they were compelled to withdraw.

The pictures to be exhibited Wednesday are being shown as examples of the interesting and excellent work that is being done in the amateur field, according to Film Study's announcement. Many of them are prize and award winning pictures. All are of great interest, and the level of technical achievement is surprisingly high. Several of them are of special significance just now the film from Czechoslovakia, for example, is pointedly anti-war in its theme.

"While the quality of these amateur films is uniformly high," the announcement concludes, "their subject matter is so diversified as to insure an interesting evening for the spectator, whether he is an amateur motion picture enthusiast or not."

The program is as follows:

TO THE SHIPS OF SYDNEY

James A. Sherlock, S.A.C., and an officer in the Australian Amateur Cine Society. This film, on Kodachrome, was some two years in the making. In the 1937 contest sponsored by The American Cinematographer it won the grand prize and also a class prize.

MOUNT ZAO

Khoji Tsukamoto, of Tokyo, and officer of the Sakura Kogata Eiga Kyokai ("The Cherry Amateur Movie Society"). This film won first prize at the Barcelona exposition in 1935, first prize in the international contest sponsored by the British Institute of Cinematography in 1936, a prize for photography in the American Cinematographer's 1937 contest and the distinction of being selected as one of the ten best by the Amateur Cinema League.

FOURTH IN HAND (a fantasy of the card table)

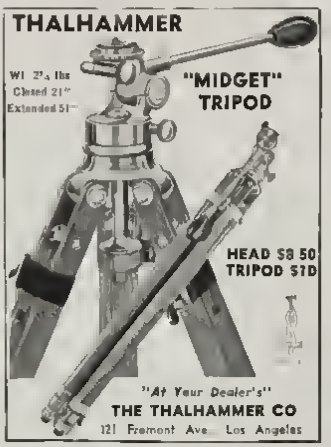
The Meteor Film Producing Society, Glasgow, Scotland. Shared first place at the fourth Scottish Amateur Film Festival last year and was granted honorable mention in a contest sponsored by the Amateur Cine World, London.

L'HISTOIRE D'UN SOLDAT

Cenek Zabradnicek of Prague, Czechoslovakia. Of this film Dr. Hugo Fleischer of Vienna writes: "Zabradnicek is an author whose films are always original; and 'The History of a Soldier' is, in my opinion, quite the strongest amateur performance of these last years." Dr. Fleischer is the maker of the film which won the grand prize at the Paris International last summer.

GLOIRE A L'EAU

Abbe Albert Tessier, Trois-Rivieres, Quebec. The Abbe Tessier, who is a lecturer at Laval University, Quebec, made this film for use in connection with his own educational work. The film should be viewed with this in mind.



DRIFTWOOD

Ace Movies, an amateur film society in London. Acquired through the British Institute of Cinematographers.

BOMMERLI

Richard Groschopp of Dresden, Germany. This film has won first prizes in Budapest, Tokyo, Vienna and Berlin. Its maker, whose earlier prize winner was "Kleine Koenigs Tragodie," has lost his amateur standing since this film was made. Formerly he was a confectioner in Dresden whose leisure time hobby was movie making. Now he has accepted a position with a large commercial company.

PRIZE WINNER

J. Kinney Moore, of Kansas City. This film was a class winner in the 1937 S.A.C. show. It also won a $500 prize in the Pete Smith-Liberty Magazine contest last year.

Let Charlie Say It

Charlie McCarthy, that imp of Edgar Bergen, A.S.C., lost no time in putting the set of "Letter of Introduction" at Universal studios into a roar of laughter.

During rehearsals for the first scene of the picture, between Bergen and McCarthy, John M. Stahl, the director, was having some trouble getting just the exact timing he wished. He made a suggestion to Bergen.

"Go ahead, play it in your own way."

And McCarthy cracked back, "Why the hell didn't you tell us that in the first place?"

The laugh that followed broke the tension of the first day's shooting and the scene soon was "in the box."

Mogull Issues Catalogue

Mogull Brothers of 1941 Boston Road, New York, have issued a 72-page catalogue devoted mainly to a listing of 16mm. silent motion picture films. The divisions are of Dramas, Comedies, Cartoons, Sports, Travel, Religion, Education and Miscellaneous.

Showing the range and the length of the subjects in the features department alone there are 165 films ranging in size 200 titles in the comedies and nearly a hundred in the animated cartoons from three to eight reels each. There are

— — —

Bay Empire Near Limit

The Bay Empire 8 m.m. Club of Oakland had a hundred percent turnout in March. There is room for five more members, information regarding which may be obtained from Glenn Burks, 4014 Lyon Avenue, Oakland, or phone AN. 2541.

Legibility and Pictorial Value Lead Desirable Title Qualities

By WM. STULL, A.S.C.

ADMITTING that the first requisite of a motion picture title is legibility, surely the second is pictorial effectiveness No other single feature so surely differentiates the films of the advanced filmer from those of the novice as do well-executed decorative titles

There are an infinite number of ways in which titles can be "dressed up" Some of them are simple, and some can be as intricate as one wishes to make them Some require a knowledge of hand lettering or sketching, others a knowledge of trick camerawork, still others can produce the desired trick effects by relatively simple methods But all of them, properly used, add a much desired touch of professional finish to the home film

One of the most effective and at the same time one of the simplest ways of dressing up titles is to employ patterned backgrounds This can often give the effect of double-exposure trickery, yet it is a simple "one-take" proposition.

All that is necessary is to letter the wording of the title over any desired background, which may be either a picture, a drawn design or a decorative pattern A very useful method tying a main title, or a title introducing an important new sequence into the pictured action, is to use as a background a still enlargement of the opening frame of the scene to follow

Effect of Disappearance

The title wording can be lettered directly on the print, and if the card is properly aligned in the titler and the joining splice is smooth the effect on the screen is of the wording suddenly appearing as the pictured background comes to life

If, of course, you are one of the fortunate filmers owning a camera equipped to wind back, you can amplify this idea to give the effect of a double-exposed title without involving the problems of double exposure

Simply have two really identical prints made of your background photo- Letter your wording on one and leave the other blank When you have finished your title shot, fade out Then wind back, as in a lap dissolve, and substitute the unlettered photo, taking care to align it accurately Now fade in

If you make your cut to the actual scene immediately after the fade-in you will get the effect of the lettering fading out just before the scene springs into action—apparently a double exposed title made at one take-

In this, as in many other one-take methods of using lettering over decorative backgrounds, it is not always convenient to letter directly on a background which one may want to use again If this problem arises it is quite simple to take a leaf from the animated cartoonist's book

Simply letter on a sheet of celluloid and when you photograph your title place the celluloid directly over the background card In doing this it is a good idea either to use fairly heavy celluloid or to photograph through a pane of glass which will hold the "cell" flat, preventing wrinkles.

Not So Difficult

Double exposure titles are not nearly as difficult as they seem They are especially simple in 8mm work, where the film is always run through the camera twice, emerging wound on its original reel, with the starting end out But double exposures in 16mm are by no means difficult

The first thing in any kind of double exposure work is a marked starting point If you have confidence in your camera's footage meter you can simply mark a starting point at the start of the roll's leader, thereafter keeping close check of the footage run off for leader

If, on the other hand, you do not trust the footage counter for closely accurate measurements, run off your leader and then remove the lens and mark a frame or two through the aperture For the second exposure, simply run off your leader, take off the lens and watch for the marked frame

This indicates that it is a good policy to shoot double exposures at the beginning of a roll Obviously, it simplifies the matter of matching the starting points of the two "takes"

Which of the two exposures—background or lettering—to make first is governed largely by convenience The writer prefers to make the background exposure first but that is purely personal preference

In any event make the first exposure Then you have the option either of finishing the roll in the ordinary manner or running it immediately through the camera with the lens capped or (in many 8mm and other cameras) with the diaphragm completely closed, so no light reaches the film.

Must Be Rewound

With an 8mm camera, running the film through the camera twice in the usual way (either photographing or with the lens closed) brings you back to the starting end of the film With a 16mm camera the film must in some way be rewound. This can be accomplished in a

Title [illegible] still photograph.

darkroom or changing bag, but it also can be accomplished in the camera itself

To do this it is necessary to use two Agfa spools, which, unlike Eastman spools, have square hubs on both sides Regardless of what kind of film you use, load it for the first exposure to take up on to an Agfa spool Then when the roll is run through, put the film again on the top spindle, and thread it through the camera, again taking up on an Agfa spool

For this rewinding run have the lens capped, so no exposure is made Now you have the film rewound, and thanks to the hub construction of the Agfa spool you can again run the film through—for the third time—quite as though it never had been through a camera before

At this point it is simply a matter of reaching your marked starting point and making your second exposure

Balancing the two exposures is important, especially in color filming The best way to do is to cut both exposures in half, the aggregate naturally will be a full normal exposure

A very simple way to do this, if you use a meter, is to set the film speed at double the normal value—16 instead of 8, for instance, if you are using Kodachrome—and proceed normally from this basis Simpler yet is to remember to cut the normal exposure one full stop

Background of Wide Choice

In making such double-exposed titles your background can be anything desired It can be an actual, moving scene a photograph, a drawing or a pattern In the 1937 American Cinematographer International Amateur Movie Contest, the double exposed title backgrounds included patterns made by using marbelized linoleum, wallpaper and tapestry

The lettering should, of course, be white on a black card In this connection it should be pointed out that the commercial title boards which consist of felt covered ridges upon which are placed cut-out white celluloid letters are not very satisfactory for double-exposed titles, especially in color The ridges show up too prominently, giving an effect something like the lines on the old Kodacolor film

The newest method making this type of title—with either moving or still backgrounds—is background projection Within the last few weeks the manufacturer of the background projection screens used in the process departments of most major studios has introduced a small screen especially for amateur use

The desired background may be projected on this screen from behind, while the title is lettered on a sheet of glass or celluloid placed sufficiently far in front of the screen so that the front lighting can be shielded from the screen

Mechanical Interlock

It is not a particularly easy task to interlock the average amateur camera and projector for fully synchronous background projection, though with some outfits like the Eastman Model A and Specials it can be done by using electric motors to drive the camera,

In some other cases a purely mechanical interlock is possible Using a projector which, like the Bell & Howell 8, has a multi-bladed shutter revolving many times for each frame, it is also possible to get satisfactory results simply by running the projector faster than normal, and the camera slower than normal, so that each frame photographed records two or more open periods of the projector's shutter

But even without the use of such normal synchronized projection methods the average filmer has two excellent possibilities First is the use of a still background, projected by any of the several miniature film-slide projectors and using either black-and-white or Kodachrome transparencies made with a minature camera.

The second is stop motion This is a rather tedious process, but it works You simply project the 16mm or 8mm background one frame at a time, like so many stills Since practically all home movie projectors are fitted with a knob for moving the film slowly by hand, this is simple enough

With such cameras as the Simplex, the newer Filmo eights, and of course the Cine-Kodak special, all of which have single-frame releases, the camera end of this stop motion work is also simple But even with ordinary cameras, it is possible to expose only one or two frames at a time by using a quick, light touch on the release

There was a surprising amount of successful stop-motion work in the prize winning film "Solar Pelexus"; and the Stewart-Warner 16mm camera with which it was made does not have a single-frame release The animation was done simply by this light touch on the trigger

Trickery by Animation

The title trickery that can be done by animation is really a chapter in itself Individual letters can dance around to form themselves into words, inanimate objects appropriate to the picture, can form themselves into letters In one of the more notable contest films of a few years ago, detailing the manufacture of locks, a handful of screws and keys were animated to form the title of the film

Filming such titles in 16mm, the familiar old trick of getting reversed motion by turning the camera upside down and then inverting the film in the cutting, is extremely useful. Naturally it is much easier to form the objects into perfect words and letters, and then let them disintegrate haphazardly than to attempt to marshal them into letters by animation.

Help or Hamper

For this type of work it is best to fix your titler so that it can be used in a vertical position, with the title board flat and level below the camera In this case, too, it is easy to get around the difficulty of holding the camera upside down, for the same result is had if the letters are upside down in relation to the camera

It need scarcely be pointed out that this type of reverse motion filming cannot be done in 8mm

There is, too, always the question of when these "dressed up" titles are suitable and when they will hamper the picture In general they are best used only for opening titles and subtitles introducing a new sequence For ordinary descriptive titles, or for spoken titles, they would be distinctly out of place, as they tend to distract attention from the action

The lettering of these titles, or any titles, for that matter, is extremely important The lettering must be clearly legible, and neatly executed It is an advantage always to use letters as large as can conveniently be used on the size of card employed; similarly, the letters should be of a simple style which can be read quickly

Aside from the commercial outfits using cut-out or stamped letters, the amateur title-maker has the choice of three methods of getting his lettering—hand-drawn letters, typewritten letters and printed letters

Hand lettering is to be recommended only if one can do it skillfully, for nothing can look more amateurish than a bad job of hand lettering A recent development in this field, the Wrico lettering guide, should prove most helpful in this type of titling

The guide consists of a heavy celluloid ruler with stencil openings through which the letters may be traced Those who have used these guides state that excellent lettering can be done with very little practice A good variety of types and sizes of letter is available

Typewritten titles are generally suitable only for temporary use, since nothing can disguise the fact that they are typewritten Some of the newer typewriter type faces help to take the curse from typed titles, however

The best and most professional looking titles are those using printed letters Any good printing shop will be able to supply a good variety of type faces, and to print them in white or silver ink on black paper

Printed Titles Best

With the exception of hand lettering done by a commercial card writer, these printed titles are probably the most expensive; even so, their cost is by no means excessive when compared to the results given

The writer recently had a set of 38 title cards printed for a three-reel production at a cost of a few cents over $5. When one can have all his titles printed for less than the price of one roll of 16mm film the economies of hand lettering seem small indeed

Finally, a word about the limitations of coloring in Kodachrome titles In making black-and white titles we know we want the maximum possible monochrome contrast between the card and letters clear white against dead black In color, we want an equal degree of contrast, and it can be a chromatic contrast, as well

Therefore pick color combinations of

AMERICAN CINEMATOGRAPHER HAND BOOK *and* REFERENCE GUIDE

SECOND EDITION

Written and Compiled by
JACKSON J. ROSE, A. S. C.

We Wish You to Know That...

The success and complete sell-out of our previous Hand Book and Reference Guide and numerous requests for additional copies have prompted us in preparing for publication the Second Edition of the American Cinematographer Hand Book and Reference Guide.

This Hand Book is indorsed and recommended by the leading cinematographers of Hollywood. Full and complete with the latest information for all types of photography. Professional 35 m.m., amateur 16 m.m. and 8 m.m., miniature cameras, films, filters, lenses, formulas, calculators, color systems, projectors, make-up, timers, film speeds, etc.; it is just jammed full of the right kind of information. 200 pages of it, all of this printed on the very best paper with a fine grain flexible cover. Pocket size—the right size that fits into your pocket.

... PRICE $3.00 ...

American Society of Cinematographers

1782 North Orange Drive **Hollywood, California**

definitely contrasting colors or, best of all, use white letters against a dark colored card. Never try to use lettering and backgrounds of related colors, as there will be insufficient color contrast to give a satisfactory title.

In this connection, too, experience teaches that it is best—even if more costly—to use Kodachrome titles for Kodachrome films, as the difference in the thickness of monochrome and color films is sufficient to throw one or the other out of focus when projected.

But in any event—title your films. Dress them up with "dressed up" titles. You'll be amazed at the professional finish such titles give even the simplest picture!

Good Program Shown at Littles' Well Attended Ninth Movie Party

THE Ninth Annual Movie Party, for nine years conducted by Duncan MacD. Little and this year sponsored by Columbia University as a part of the activities of its division of film study, was held March 23 in the McMillin Theater, Broadway and 116th street, New York, to an audience of 500 persons.

Seven subjects were shown as selected by the jury announced in these columns last month. Five days prior a preview of the same program had been held in the Salle des Artistes, 1 West 67th street, which was attended by over two hundred of the followers of the previous parties. The program selected by the jury was as follows:

"Eclipse over Peru," "Cinecoles," New York City.

"Way to Victory" (1 reel), Photo Pations Club, East Side High School, Newark, N. J.

"Porpoise Oil, Alexander Leighton, M.D., Baltimore.

"Voyageur's Trail," Duncan MacD. Little, New York.

The Story of the Kentucky Derby, 1937, Lillian McNulty, Louisville.

West Texas Panther Hunt, Tom D. Park, Tulsa, Okla.

"Mystery in the Forest," Khoji Tsukamoto, Tokoyo, Japan.

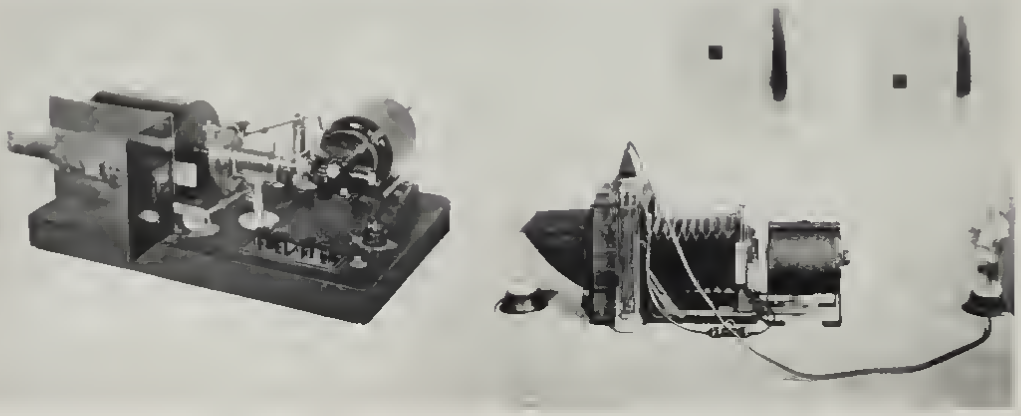
"The films this year were even better than last," writes Dan Anderson in The New York Sun. 'Porpoise Oil,' by Dr. Alexander Leighton of Baltimore, showing, in color, how the Mic-Mac Indians kill porpoise in the Bay of Fundy and try out the oil—it's really a vanished business now—would compare favorably with many a commercial educational short.

"'Eclipse Over Peru,' a Cinecoles picture made by Charles Coles when he went with the Hayden Planetarium expedition to Peru for the total eclipse last year, is a gorgeous bit of colored travelogue. Mr. Little's own 'Voyageur's Trail' rounded out the color section of the program handsomely.

"Dr. Leighton's film was particularly impressive in that it left a watcher with the idea that he could direct a porpoise hunt and the extraction of the oil, no apparent gap remained in the explanation of the process. Omission of just one such essential will spoil an otherwise excellent film, and it often happens, but not in this instance.

"Three of the four remaining black and whites were documentary, too. 'Mystery in the Forest' came from Khoji Tsukamoto in Japan, a series of bird pictures of beauty and interest, with shots of heron chicks emerging from the shell outstanding. 'West Texas Panther Hunt,' by Tom D. Park of Tulsa, Okla., caused the averting of more than one pair of feminine eyes as the dogs closed in on the big cat, which cuffed them back and might have won freedom except for the man behind the gun behind the dogs. Lillian McNulty gave a thorough behind-the-scenes view of a big horse race in 'Kentucky Derby, 1937.'"

Left—Flashometer—The first precision apparatus for recording the time relation of camera shutters and flash lamps. Right—General Electric Synchrograph, simple and inexpensive device for checking synchronization of photoflash lamp and camera shutter. Adapted to use by news and other photographers.



Farnham and Associates Honored

(Continued from Page 147)

lenses and apertures from 8 mm motion picture systems to giant stereopticons. Holders reversible for greater flexibility of set-up, and serve also as screens.

(3) Micrometer adjustment in all directions for source and mirror, separately or as a unit.

(4) Integrating sphere hinged for swinging in or out of optical train.

(5) Bench adjustment for height and angle to meet any screen requirement.

The flashometer is the first precision apparatus for recording the time relation of camera shutters and flash lamps with the advantage of direct reading and convenience. It was subsequently adopted by Lamp Development Laboratory and adapted by Farnham for factory.

Important in design and control of photoflash lamps, in development of synchronizers, and in analyzing shutter adjustments. Semi-portable models made for several of the larger news services and lamp division offices.

General Electric Synchrograph

The synchrograph provides an entirely self-contained, simple and inexpensive device for checking synchronization of photoflash lamp and camera shutter. Adapted to use by news and other photographers. For the photographers' purposes it is as effective as the much more costly and bulky Flashometer.

Drum rotated by twirl of fingers. Contains group of three ports, each, at camera and flash lamp ends to record traces as shown in photograph. Direction and amount of synchronizer adjustment thereby clearly indicated.

Has very largely eliminated the former plague of lamp complaints arising from improper synchronizer adjustment.

The flashograph is the newest member of the family. The recommendation for the award sets forth it is a complete life testing laboratory for flash lamps, automatically recording the history of luminous output from the time of closing the switch. Its cost is stated to be but a small fraction of an oscillagraph assembly and that operation is more simple and expeditious.

To the Four Corners

WITHOUT knowing what newspapers in other communities may be reporting about storm conditions in Los Angeles and Southern California generally, it may be of significance to state that in the first delivery on the morning of March 7 three letters were received by the American Cinematographer.

Two of these were from Chicago postmarked March 1—which usually would have been delivered by train mail March 4—and a subscription from Morocco. That was a pretty slim mail, especially for an eye-opener on a Monday morning. But—

Again it may be of significance to set forth that the subscription from Casablanca, West Morocco, marks the fifty-second land outside the boundaries of the forty-eight states of the United States to which each calendar month the Cinematographer now spreads its sturdy wings.

Visual Educationists Meet June 20 in Chicago School

The conference council of the national conference on visual education and film exhibition met February 23 in Chicago. Plans for the 1938 conference were drawn up, and invitations extended to a number of prominent speakers in the educational and advertising fields. The dates set were June 20, 21, 22 and 23 at the Francis W. Parker School, Chicago.

The conference committee has planned to make this year's conference a series of intensive open forums, film exhibitions and clinical discussions. Production problems, film distribution, methods of handling films, utilization of film programs in educational curricula and a general discussion of films themselves will form the leading features of the conference.

A banquet in honor of Herman A. DeVry's 25th anniversary in the motion picture field is being planned by a special committee.

New Willoughby Pricelist

Willoughby's has issued No. S 338 of its Photographic Supplies. The publication is 5½ by 8¼ inches in size and contains sixty pages of closely packed lists of equipment regularly carried in stock. To the photographic addict the book makes interesting perusal. It's quite certain to uncover to him the one thing for which he has great need — and maybe several others in lessening degree.

A new enlarging focus finder, which will be welcomed by users of hand-focused vertical enlargers such as the Kodak miniature enlarger, is announced by Eastman.

Helm Invents Portable Cinema Testing Set-Up

A NEW unit as handy as the exposure meter is now ready for use in the Portable Camera Testing Laboratory, not much larger than a good sized suitcase and weighing approximately twenty-five pounds This was invented by Ennis C Helm, member Local 666, Chicago, Universal Newsreel free-lance field cameraman, Oklahoma City

Helm's invention and development have been carried through all types of tests and found to be stable and efficient in saving time and delays of motion picture productions

The unit eliminates all types of studio laboratory doghouses, trailer laboratories for testing purposes and the loss of time in sending the negative to the main laboratory for processing for test

Recently it was found twelve negatives could be tested at one time and from each an 8 by 10 paper enlargement could be delivered, the first test print in about seven minutes and the others at about two minute intervals or just the negatives in about four minutes

These tests can be carried on in either the studio or out on location, and the space necessary is about the same it takes for a person to stand in or about that which it takes to place a camera and tripod

It can be worked in all types of light conditions, and, too, tests can be carried on while in transit in aeroplane, automobile, yacht, speedboat and other means of transportation as the unit is only 20 inches long, 18 inches high and 15 inches wide.

The unit has its own electrical power source and divorces itself from all outside needs When working under either extreme hot or cold conditions a special heating or cooling unit is furnished which takes care of keeping the solutions at the proper temperatures, thus giving the same temperatures as found in the main laboratory tanks These units are small and compact and are carried in a small case not much larger than a portable typewriter and weighing about the same.

Ennis C Helm working in his temperature controlled Portable Cinema Testing Laboratory, observing through patented viewing windows equipped with light traps and filter glass his progress in developing of twelve negative strips and making 8 by 10 enlargements

The laboratory will be manufactured in Oklahoma City, where the inventor is carrying on several other photographic improvement designs

Agfa Adds Darkroom Outfit To Its Amateur Equipment

A new developing and printing kit has now been added to the Agfa material provided for amateurs who wish to finish their own films Known as the Agfa darkroom outfit No 2 this new set includes somewhat more complete and elaborate equipment than was provided by the No 1 outfit.

This new darkroom outfit forms a desirable developing and printing set for every beginning amateur who wants an outfit that will serve as the nucleus of his darkroom equipment—to which he can add additional items as he extends his developing and printing activities Manufactured by Agfa Ansco Corporation the darkroom outfit No 2 is available at photographic dealers

HOLLYWOOD ART FEATURETTES
for ART STUDENTS!
MOTION PICTURES OF ART MODELS
8mm or 16mm
Art Studies for Home Use
PACIFIC CINE FILMS 5575 SANTA MONICA BLVD. HOLLYWOOD, CALIF.

KODACHROME
DUPLICATES 16mm 35mm
STITH-NOBLE CORP.
YO 0531
845 North Martel Ave., Hollywood Calif.

8 Enlarged TO 16 Reduced TO 8
Geo. W. Colburn Laboratory
Special Motion Picture Printing
1197 MERCHANDISE MART
CHICAGO

CRAIG
SPLICER and REWINDS
8 or 16
CRAIG JUNIOR COMBINATION $8.50
Junior Splicer with two geared rewinds all mounted on 21" board
CRAIG MOVIE SUPPLY CO
1053 So Olive St Los Angeles Calif

HUGO MEYER Ciné LENSES
SPEEDS f/1.5 TO f/5.5
HUGO MEYER & CO
245 W. 55 ST., NEW YORK

NATURAL COLOR
8 x 10 PRINTS $5.95
5 x 7 PRINTS $3.95
From KODACHROME
3 x 4 PRINTS from 16mm $3.95
Ruthenberg Co. The leading Makers of Natural Color Photographs
4961 Sunset Blvd Dept A4, Hollywood Calif

Eastman Makes Enlarger for 16 mm.

Enlarger making black and white [illegible] frame

A COMPACT new enlarger for making blark and white negatives from single frames of 16mm motion pictures is announced by Eastman

Operation of this devise is so simple that errors are almost impossible Negatives may be made in a few seconds from either black and white film or Kodachrome, and from these enlarged negatives both contact prints and greater enlargements are possible.

The enlarger is of particular value to the amateur movie enthusiast who possesses no darkroom or other facilities for making enlarged "stills" from his 16mm reels. It permits the making of a series of negatives in rapid succession and eliminates the need of immediate processing. The enlarger loads with a standard daylight-loading film roll, which can be developed at leisure by the maker or sent to a photo finisher.

One of the major virtues of the new device is that it facilitates the making of enlarged "stills" at the time the reel is edited Heretofore, this work has involved delays, troublesome darkroom work, recutting of the film reel, frequent loss of good frames, additional splicing, and other annoying, time-consuming operations

Aside from production of prints for album use or for mailing to distant friends, the enlarger has a variety of uses Prints from the enlarged negatives, either black and white or tinted, can be utilized as title backgrounds.

The enlarger is constructed, for compactness, in the form of a folding Kodak, and is loaded and operated in much the same way A film gate, mounted before the enlarger lens, has a mask opening the exact size of the 16mm. frame The film is positioned over this opening, between guide pins

A locating pin engages one perforation, keeping the film in exact alignment There is no cutting of the movie film After positioning, the cover of the gate is closed, and a brief exposure made by incandescent light

Cameramen

Won't Be Disappointed Using a

GOERZ

KINO-HYPAR LENS

F 2.7 AND F 3

Focal lengths 15mm to 100 mm
Can be fitted in suitable focusing mounts to
Amateur and Professional

MOVIE CAMERAS

Undistorted Microscopic

DEFINITION

Clear-cut crisp

BRILLIANCE

*

MOVIE CAMERA ACCESSORIES

Such as Effect and Trick Devices, Vignetters Focusing Microscopes, Reflex Focuses, Variable Field View Finders, etc

Address Dept. H 4

C. P. GOERZ AMERICAN OPTICAL CO.

Makers of Goerz Lenses in America • Since 1899 •

317 E 34th St. New York, N. Y.

Our name is your guarantee

CLASSIFIED ADVERTISING

FOR SALE

REBUILT SILENCED AND STANDARD BELL & HOWELL 170° CAMERAS, Bell & Howell single system, complete; rebuilt B & H sound printers rebuilt Duplex sound and picture printers; 200 ft. Stinemann developing reels used measuring machines Used Mitchell cameras complete Akeley camera equipment Akeley 1000 ft magazines synchronous camera motors Bell & Howell 1000 ft 400 ft magazines Motors sunshades finders lenses and all accessories

Write, wire or cable
MOTION PICTURE CAMERA SUPPLY, INC
723 Seventh Avenue New York City
Cable Cinecamera

BELL & HOWELL 5-WAY SOUND PRINTER Generators Panel Control Boards Duplex Printers Sonnd Maviolas Developing Machines Blimps Dolly B & H splicers Mitchell and B & H Silent Cameras Motors High-Speed Gear Boxes, Light Testers Projection and Lighting Equipment Guaranteed optically and mechanically perfect. Send for 1937 Bargain Catalogue Hollywood Camera Exchange 1600 Cahuenga Blvd Hollywood California Cable Hicamex

WE BUY SELL AND RENT PROFESSIONAL AND 16 mm EQUIPMENT NEW AND USED WE ARE DISTRIBUTORS FOR ALL LEADING MANUFACTURERS RUBY CAMERA EXCHANGE 729 Seventh Ave New York City Established since 1910

COMPLETE DODGE SOUND TRUCK READY for production Blue Seal unifrty variable area recording system powerful mike boom extension mixer batteries cables all accessories—guaranteed
BLUE SEAL SOUND DEVICES INC
— Seventh Ave New York City

PRINTING and duplicating of motion pictures Continuous machine development under sensitometric control RUSSELL I CAPWELL 41 West Warwick Ave West Warwick R I

BELL AND HOWELL 170° CAMERAS—High speed shuttles—high speed gear boxes—400 and 1000 foot Bell & Howell magazines—Bell & Howell tripods—motors Mitchell silenced cameras AKELEY and DEBRIE CAMERAS Akeley motors High speed motors Sunshades lenses and finders

Write or Wire
CAMERA EQUIPMENT, INC
1600 Broadway New York City
Tel Circle 6-5080 Cable Cinequip

BELL & HOWELL MOTORIZED EYEMO LIKE new 17 mm Cooke F2.3 Kinic 35 mm Cooke F2.3 Kinic 6 mm Cooke F4.5 Kinic. New motor B & H 110 v AC or DC New Freehead Tripod B & H Two 400 ft Magazines Camera Cover Filter Slot in Camera Full and Academy Aperture Head Magazine and Battery Case Leather and Canvas Tripod Case Price $650.00
LANDEAS & TRISSEL
6313 Sunset Blvd Hollywood Calif

EQUIPMENT—FOR SALE AND RENT

MITCHELL BELL & HOWELL AKELEY DEBRIE EYEMOS Cash for your used 16 and 35mm cameras Camera-Mart Inc 11th West 4th St New York

WANTED

WE PAY CASH FOR YOUR USED CAMERA LABORATORY AND STUDIO EQUIPMENT
Write wire or cable
MOTION PICTURE CAMERA SUPPLY INC
723 Seventh Avenue New York City

WANTED We pay cash for everything photographic Send full information and lowest cash prices HOLLYWOOD CAMERA EXCHANGE
1600 Cahuenga Blvd Hollywood Calif

WANTED TO BUY FOR CASH

CAMERAS AND ACCESSORIES
Mitchell B & H Eyemo DeBrie Akeley
Also Laboratory and Cutting Room Equipment
CAMERA EQUIPMENT INC
1600 Broadway New York City Cable Cinequip

Society of Amateur Cinematographers

+ + +

CHARTER MEMBERSHIP CLOSED

+ + +

THERE WILL BE ONLY 1000 REGULAR MEMBERSHIPS AVAILABLE—

THEN THE MEMBERSHIP WILL BE CLOSED

+ + +

Fee $5.00 a Year

+ + +

Membership will include a subscription to the American Cinematographer. It also will include the use of the outstanding films made by members of the Society of Amateur Cinematographers. If films are submitted, the best will be duplicated and an analysis prepared by members of the American Society of Cinematographers. This analysis will go with the picture and the picture will be available to any member of the Society of Amateur Cinematographers.

+ + +

Technical consulting service

+ + +

Film review service. Send your films if you like for criticism and review by the acknowledged camera-masters of the world, by Hollywood's greatest Directors of Photography.

Society of Amateur Cinematographers
1782 North Orange Drive

Hollywood, Calif. Date

I hereby apply for membership in the Society of Amateur Cinematographers. My remittance for $5.00 made payable to the Society includes the payment of dues. Of this amount $2.50 is to apply to a year's subscription to the American Cinematographer

MEMBERSHIP—$5.00 a year

Name _____

Street _____

City _____ State _____

Please print name and address

DIFFERENT

From Any Other Screen

ONLY THE DA-LITE CHALLENGER

Gives You All of These Advantages

1. IMPROVED GLASS-BEADED SURFACE for the brightest, clearest pictures you have ever seen. Applied by Da-Lite's new improved process, the beads on this surface are now uniformly distributed, and reflect more light over a wider area. They faithfully reproduce all color values in the film. They are guaranteed not to shatter off. Only the Da-Lite Glass-Beaded surface has all these advantages. Da-Lite also makes Mat White and Silver screens but the Da-Lite Glass Beaded Screen is recommended for the average projection requirements.

2. SQUARE TUBING (Not round) in the center rod of tripod and extension support prevents case from turning and throwing part of the picture out of focus—an exclusive feature of the Da-Lite Challenger.

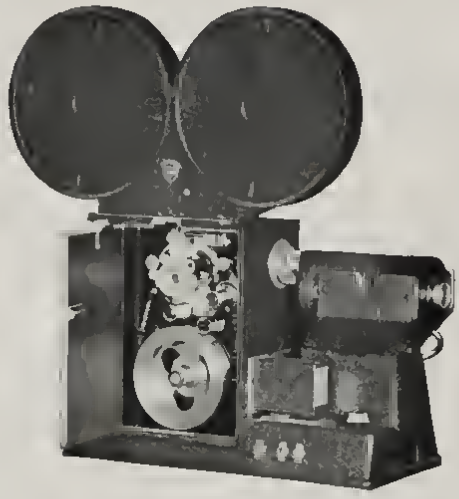
3. ADJUSTABLE HEIGHT. The fully opened 39" by 52" Standard Challenger can be adjusted so that the bottom of the case is 37" from the floor, 46" from the floor or 54" from the floor. Other sizes permit adjustments in height, proportionately greater or smaller. The screen when raised, locks automatically in position. No thumb-screws!

The Challenger is only one of many styles in the Da-Lite line. See these finer screens at your dealer's or write for free literature!

DA-LITE SCREEN CO., INC.

Dept 4AC, 2723 N. Crawford Ave., Chicago, Ill.

Mitchell Sound Recorder



Built to the same high standards of the Mitchell Cameras and giving equally fine results.

A Portable Unit for Studio or Location Work

Mitchell Camera Corporation

665 NORTH ROBERTSON BOULEVARD
WEST HOLLYWOOD, CALIF.

Cable Address MITCAMCO Phone OXford 10[illegible]

AGENCIES

BELL & HOWELL CO., LTD., London, England
CLAUD C CARTER, Sydney Australia
D NAGASE & CO LTD Osaka, Japan
MOTION PICTURE CAMERA SUPPLY, INC., New York City
BOMBAY RADIO CO., LTD. Bombay, India
H NASSIBIAN Cairo Egypt